FEBRUARY, 1959
VOL. I, NO. 10

Problems of Economics

ВОПРОСЫ ЭКОНОМИКИ

English Translation of the U.S.S.R. Monthly Journal VOPROSY EKONOMIKI

UNIVERSITY OF HAWAII
LIBRARY
MAY 14 '59

IN THIS ISSUE

Great China Builds Socialism

Relationships of Expanded Reproduction

The Laws of Geographic Distribution of USSR Socialist Production

How to Stimulate the Utilization of Industrial Basic Production Funds Through the System of Cost Accounting

Some Problems of the USSR Power Balance in Light of the Tasks of the Long Range Plan

Problems of Procurement and Processing of Livestock Products

State Monopoly Capitalism and the Struggle for Socialism

Concerning Contemporary Bourgeois Theories of Economic Dynamics

Commodity Production under Socialism

Once More About Textbooks on Industrial Economics

The Journal of the U.S.S.R. Academy of Sciences, Institute of Economics

AUTHORIZED TRANSLATOR AND PUBLISHER . . .
INTERNATIONAL ARTS AND SCIENCES PRESS
33 WEST 42nd STREET • NEW YORK 36, N. Y.

Problems of Economics

TABLE OF CONTENTS

L. I, NO. 10

FEBRUARY, 1959

Page

ZHAMIN: Great China Builds Socialism . . . 3
ADEMICIAN V. NEMCHINOV: Relationships of Expanded Reproduction . . . 11
LAVRISCHEV: The Laws of Geographic Distribution of USSR Socialist Production . . . 18
SPIRIDONOVA: How to Stimulate the Utilization of Industrial Basic Production Funds Through the System of Cost Accounting . . . 25
VILENSKY: Some Problems of the USSR Power Balance in Light of the Tasks of the Long Range Plan . . . 31
SEREBRENNIKOV: Problems of Procurement and Processing of Livestock Products . . . 38
LEONTYEV: State Monopoly Capitalism and the Struggle for Socialism . . . 44
OSADCHAYA: Concerning Contemporary Bourgeois Theories of Economic Dynamics . . . 49

DISCUSSIONS AND DELIBERATIONS

. KRONROD: Commodity Production Under Socialism . . . 56
KASITSKY: Once More About Textbooks on Industrial Economics . . . 63

CRITICISM AND BIBLIOGRAPHY

SONIN and G. MECHKOVSKY: A Comprehensive Labor Economics Textbook Is Needed! . . . 69
STEPANOV: A Book About the Economics and Organization of Bulgaria's Socialist Agriculture . . . 74
v Economic Literature in the Rumanian People's Republic . . . 77

SURVEYS

MAKLAKOV: From the History of Socialist Planning in the Economy of the Chinese People's Republic . . . 78

NOTES AND CORRESPONDENCE

AKHMAN: A Wrong Treatment of the Question of Labor Productivity Under Socialism . . . 85
KHOKHLOV: For Improving the System of Clearings in the National Economy . . . 86

SCIENTIFIC LITERATURE

DARYAN: In the Institute of Economics, Armenian Academy of Sciences . . . 90
IKHOMIROV: In the State University of Leningrad . . . 91
IKHOMIROV: The Work of the Institute of Economics, Uzbek Academy of Sciences, After the Reform of the Mangement System . . . 92

(Contents of the October, 1958, issue of Voprosy Ekonomiki)

PROBLEMS OF ECONOMICS

English Translation of
the U.S.S.R. Journal Voprosy Ekonomiki

EDITOR AND PUBLISHER: MYRON E. SHARPE

Problems of Economics is the English language translation of *Voprosy Ekonomiki,* journal of the Institute of Economics, U.S.S.R. Academy of Sciences. The translation is authorized by arrangement with Mezhdunarodnaya Kniga, Moscow.

Problems of Economics is a complete, literal translation, without editorial comment, of *Voprosy Ekonomiki.*

Twelve issues per year. Subscription rate: $50.00 per year (twelve issues); $4.50 per copy. $20 per year to persons associated with institutions already subscribing.

Editorial Collegium of the U.S.S.R. Journal *Voprosy Ekonomiki:*

L. M. Gatovsky (Chief Editor), P. A. Galubkov, N. N. Dyakonov, V. P. Dyachenko, A. E. Yezhov, V. A. Zhamin, A. G. Kulikov, A. N. Lavrishchev, A. P. Liapin, M. E. Moiseyev, G. A. Prudensky, T. S. Khachaturov. Technical Editor: O. Shvova.

Editorial Office: Volkhonka 14, Moscow, U.S.S.R.

The names of the editors and the editorial address of *Voprosy Ekonomiki* are given as a matter of information. The editors of *Voprosy Ekonomiki* have no connection with the translation and publication of the journal in English.

CORRECTION

The January, 1959 issue of Problems of Economics gave an incorrect date for the Russian issue to which it corresponds. It contains the September, 1958 contents of Voprosy Ekonomiki.

INTERNATIONAL ARTS AND SCIENCES PRESS
33 West 42nd Street, New York 36, N. Y.

© Copyright 1959 by Myron E. Sharpe. All rights reserved.

. *Zhamin:*

reat China Builds Socialism

The nations of the Soviet Union, the countries of the cialist camp, and all progressive peoples mark with eat joy the remarkable achievements of the Chinese peo- during the nine years of existence of the Chinese Peo- 's Republic.

The victory of the people's democratic revolution which s followed by a socialist revolution in China resulted in ofound, radical changes in the economic and political re- ne of the country. The liberation of hundreds of millions Chinese toilers from the yoke of imperialism and feu- ism and the successes in building socialism in all nches of the national economy in the Republic have enor- us historical meaning for the entire world.

The need to conform to the natural laws of building social- n, common to all countries which have embarked on the h of socialism, was revealed for the first time in history the Soviet Union, and received further support from ex- riences in People's China. At the same time building cialism in the Chinese People's Republic has original tures, conditioned by the peculiarities of Chinese eco- nic, political and historical development. The Commu- t Party of China is masterfully utilizing these peculiari- s in the process of building socialism and thereby through steady achievement of revolutionary changes in the ntry is enriching Marxist-Leninist theory by new theses l conclusions.

Comrade N. S. Khrushchev in his speech at the Seventh nference of the Bulgarian Communist Party in June 1958 d: "The creative development of Marxist-Leninist theory a task for the entire international Communist movement, all revolutionary parties of the working class. It is wn, for instance, what an enormous contribution to the ory and practice of the Socialist revolution is being de by the Communist Party of China, which is master- y combining the universal truth of Marxism-Leninism h the concrete practice of revolution and of building ialism in its country."

long with changes in the class structure of the country, ng with achievements in socialist transformation and the lization of plans for the national economy, the Chinese nmunist Party consistently advances and substantiates basic tasks for the building of socialism, expressing urgent demands of the country at every stage of its de- pment.

***

he tasks of the people's government for the immediate rying out of a radical reorganization in the economic d over the entire territory of the country were first nulated in the resolutions of the Second Plenum of the tral Committee of the Chinese Communist Party rch 1949). The Plenum decreed that on the eve of the ory of the people's democratic revolution the center of ity of the Party's work through the country should be sferred from the villages to the towns, and in its work e towns the Party should rely entirely on the working s. The central task of the people's government is the oration and development of industry. During the Ple- the status of all branches of China's economy was thoroughly discussed and the policy of the Party toward various economic structures was outlined.

The decisions of the Plenum eventually became the basis for the economic policy of the people's government, which was proclaimed in the "General Program of the People's Political Consultative Council of China" and adopted by the first session of PPCC of China on September 29, 1949. In this program the necessity of completing the tasks of the democratic revolution was stressed; the liquidation of imperialist domination, the realization of agrarian reform all over the country, strengthening and developing the state (socialist) sector and the cooperative (semi-socialist) sector of the national economy.

The victory of the revolution in China and the formation on October 1st 1949 of the Chinese People's Republic signalized the basic completion in the country of the bourgeois-democratic stage of the revolution. This found its expression in the political field in the recognition of the leading role of the working class by the peasantry and all strata of society composing the single people's democratic front. The old vicious system of state power, hostile to the people, was broken and liquidated in the process of the people's revolution; the authority of the people's democracy, being one of the forms of dictatorship of the proletariat, was established in the country.

In the field of political economy the nationalization of property of the representatives of big comprador-bureaucratic capital and war criminals was the decisive socialist measure carried out by the people's democratic state. Nationalization led to the creation of the socialist structure of the state, which became the economic support for the people's democratic state in the further fulfillment of socialist reorganization. In the early days of the transition period, measures for completing the revolutionary agrarian reorganization in the villages of China were carried on simultaneously.

By the end of 1952 the national economy of the country was restored, the agrarian reconstruction was basically completed and the socialist structure was further strengthened. The Central Committee of the CP of China, having generalized the experience gathered since the formation of the Chinese People's Republic, worked out and suggested the general line of the Party for the transition period. In 1954 this party line was approved at the first session of the All-China Assembly of People's Representatives first convocation, and inscribed into the Constitution of the CPR as the basic task of the state during the transition period. "The period from the creation of the Chinese People's Republic to the building of a socialist society" reads the preamble to the Constitution of the CPR — "is the transition period. The basic tasks of the state during the transition period are: gradual realization of socialist industrialization of the country, gradual completion of socialist reorganization of agriculture and the domestic handicraft industry and reorganization of capitalist industry and trade."

The Chinese people enthusiastically accepted the general Party line as its own fighting program. Throughout the country the gigantic work of fulfilling the First Five-Year Plan (1953-1957) for the development of the national economy of the CPR and for the realization of socialist reorganization continued at a steadily increasing tempo. In the historically short period ending at the close of 1956 the socialist revolution on the economic front, in the sphere of reorganizing the forms of ownership, was basically completed. Socialist production relations became dominant in all branches of the national economy. In 1957 more than 90% of the gross output of the national economy was in the socialist sector of industry and agriculture.

The CP of China led the mass movement of peasants for founding cooperatives, creatively applying the Lenin plan of cooperation in reorganizing small-scale commodity production. As a result of the growth of the mass movement, during the short period between the end of 1955 to mid-1956, more than 120 million peasant holdings joined agricultural cooperatives. By 1957 the percentage of peasant holdings which joined cooperatives reached 98 (96% of them in cooperatives of a higher type). During the period from the end of 1955 to mid-1956 more than five million craftsmen, i.e. 92% of the total, also formed cooperatives.

Considerable success was achieved in the field of the socialist reorganization of industrial and trade enterprises belonging to private capital by utilizing different forms of state capitalism. Seventy thousand private industrial enterprises, of which the gross production amounted to 99.6% of the total gross production of all private industrial enterprises in the country, were transformed into "state and private" joint enterprises. One million nine hundred and ninety thousand private trade enterprises, employing 85% of all working in such enterprises, were also transformed into state and private joint enterprises, state or cooperative trade enterprises, and cooperative "artels."

As a result of the reorganizations, socialist production relations became dominant in all spheres of the economy. The great results of the people's activity in reorganization were summed up during the first session of the Eighth Conference of the Communist Party of China in September 1956. The resolution passed by the Conference on the political report stated that "socialist reorganization won a decisive victory."*

After the decisive victory of the socialist revolution in China in the field of economy, the task of completing the socialist revolution on the political and ideological fronts arose before the CP of China. The campaign for improving the style of work, directed against bureaucratism, subjectivism and sectarianism, was started by the Party in 1957, and embraced the entire Chinese nation. Broad national discussions and debates were carried on in order to reveal the opinions of the workers on problems of socialist construction, to disclose defects in work and to develop criticism and self-criticism. Relying on the support of the overwhelming majority of the people, the CP of China inflicted a crushing blow on the right-wing bourgeois elements, who tried to turn China to the road of restoring the old, rotten order. The Chinese people, under the leadership of its Communist Party, won a decisive victory on the political and ideological fronts in 1957.

The great victories of the Chinese people in building socialism allowed the CP of China to develop further its general line during the transition period. In May 1958 during the second session of the Eighth All China Conference of the CP of China, the general line of the Party for the building of socialism was defined as: "straining every
nerve, striving to advance and build socialism accordi
the principle of — more, more rapidly, better and mor
economically." In the report on the work of the CC of t
CP of China it was pointed out that the basic points of t
general line were: "...to set in motion all active factor
and to solve correctly the contradictions existing amon
the people; to strengthen and develop socialist national
property and collective property; to strengthen the dict
ship of the proletariat and the international solidarity c
the proletariat; to continue the socialist revolution on p
ical, economic and ideological fronts; to bring about a
gradual technical and cultural revolution; under conditi
of preferential development of heavy industry, to devel
simultaneously industry and agriculture; under conditic
of centralized leadership, over-all planning, division o
labor and cooperation, to develop simultaneously indus
controlled by the center and local industry, to develop s
multaneously large, medium and small-scale enterpris
and to transform as rapidly as possible our country int
great socialist power with a modern industry, modern
agriculture and modern sciences and culture."*

The continuation of the socialist revolution on econo
political and ideological fronts has as its aim the furth
strengthening of socialist structures as a whole. On th
economic front it means perfecting production relation
the basis of the developing social property, on the polit
front — completion of the struggle with the bourgeois r
wing elements, re-education of bourgeois and petty-bou
geois stratas of the population and education of broad
masses of people in the spirit of socialism. The Comm
nist Party of China, carrying on this policy, proceeds fr
the belief that during the entire transition period, i.e. u
until a socialist society is built, the struggle between t
paths — socialist and capitalist — is the main contradi
tion in the country.

During the first session of the Eighth All-China Conference of the CP of China proposals for the Second Fi
Year Plan for the development of the national economy
CPR for 1958-1962 were worked out. During the secon
session of that Conference additional plans for the deve
ment of the national economy of the Republic were thor
ly discussed.

When advancing new tasks in the field of building soc
ism, the Communist Party of China relied on the succe
achieved in the development of the productive forces o
country, in the socialist reorganization of agriculture,
capitalist industry and trade, and on the victories on i
ical and political fronts, which radically changed the r
tionship of classes in the country in favor of socialism
second session of the Eighth Conference of the CP of
China ascertained that the existing conditions in the co
and the prevailing enthusiasm among the masses for w
made possible new sharp advances in the development
the economy and culture in the Republic.

***

The experience in building socialism in China clearl
proves that for the victory of the socialist method of p
tion in countries which were in the past underdevelope
economically, the victory of socialist production relati
alone is not enough; it is also necessary to achieve a c
level of development of the productive forces. The lev
development of the productive forces is characterized
only by the quality of technique used in production and
skill of the workers, but also by the amount of the mea
of production, the number in the working forces, the d

---

* "Materials of the Eighth All-China Conference of the CP of China," State Political Publications, 1956, p. 471.

* "Second Session of the Eighth All-China Conference
the CP of China," Peking, 1958, pp. 39-40.

their concentration at enterprises, and the degree of de-
lopment of the social division of labor in branches and
ritories, i.e., by the level of development of the social
aracter of production. Ultimately this finds its expression
the mass of basic products produced, taking into account
number of people in the country and the peculiarities of
national structure of social consumption.

As is known, the transition period ends when socialism
hieves complete victory and socialist methods of produc-
n are established. In the Chinese People's Republic the
cialist production relations have won on the whole, but
level of development of the productive forces, corre-
onding to socialism, has not yet been reached. Conse-
ently, the transition period in the CPR has not ended yet.

To accelerate the growth of socialist productive forces
CP of China attaches particular attention to the problem
rapid tempos of socialist construction, relying on the
illful utilization of the enormous advantages of socialist
oduction relations — relations of fraternal cooperation
d mutual aid among workers free from exploitation.

th the victory of new, socialist production relations, par-
ularly favorable conditions for the development of pro-
ctive forces and for the steady growth of social production
rapid tempos are created; this is one of the striking in-
ces which show the great advantages of the new social
der.

In the mighty growth of the country's economy the most
portant role belongs to the further development of social-
industrialization and the creation in China of a rounded
dustrial complex, embracing all the basic branches of
dustrial production. The CP of China suggested the pro-
am: under conditions of preferential development of
avy industry, simultaneously develop industry and agri-
lture. It took into consideration the fact that during the
ars of the First Five-Year Plan in China, a solid base
socialist industrialization was created, and because
ll more than 85% of the population is occupied in agricul-
e a proportional development at a rapid tempo of the
rious branches of economy, including light and heavy
lustry, is impossible without a sharp advance in agricul-
al production. The success of this course requires the
bilization of the enormous, more than five hundred mil-
n strong, army of peasants for service in socialist
lustrialization and the mobilization of all workers for the
lization of the technical reconstruction of agriculture.

The second session of the Eighth Congress of the CP of
ina approved the Party line: to overtake and surpass
gland, in the next 15 years or sooner, in the manufacture
the most important types of industrial production.

ince the spring of 1958 People's China has been expe-
ncing a new sharp advance in its economic development.
s confirms the practicability of the rate of development
jected by the CP of China. Gross production of industry
ing the first half of 1958 increased 34% compared to the
e period of 1957. It is characteristic that the rate of
wth of production increases every month.

June 1958 the gross production of industry increased
and in August it was twice as large as in the same month of
previous year. It is expected that for the full year 1958 in-
trial production will rise 60% above the 1957 level.

he rapid tempo of development of industry in the CPR
learly seen by the example of the growth of production
errous metallurgy. Owing to the success of the First
-Year Plan in the development of the national economy
e country, production of steel in China increased in
7 more than four times compared with 1952, and
unted to 5.35 million tons. Let us remember that Eng-
l now produces 22 million tons of steel a year.

The mighty movement of the broad masses of Chinese people for a more rapid advance in production and the development of a movement for improving the style of work, along with the struggle against wastefulness, allows considerable extension of the scale of capital construction in ferrous metallurgy above the orginally outlined plan. Extensive work on building the 49 most important projects for ferrous metallurgy was begun in 1958. Besides the development of the old base of ferrous metallurgy of China — the Anshan metallurgical combine — large new centers are being created — Baotow and Wuchan metallurgical combines. At the same time a national movement for building medium and small enterprises of ferrous metallurgy is developing all over the country. During eight and a half months of 1958 some 350,000 small-size blast-furnaces were built in the Republic.

The enlarged meeting of the Politbureau of the CC of the CP of China, held in August 1958, made an appeal to the Party and the people to strain every nerve to achieve production of 10,700,000 tons of steel during the current year as against 5,350,000 tons produced in 1957, i.e. to double the 1957 production. According to the plan, the Chinese People's Republic will surpass England in the production of steel and other important types of industrial production by 1959.

The coal industry achieved outstanding success. The results of its development allow expectations that by 1959, the CPR will overtake England in the amount of coal extracted. During the current year China will produce 210 million tons of coal.

The CP of China attaches great importance to the development of the technical revolution, because a rapid tempo in the country's economic development, considering the existing level of development of the productive forces, can be secured only under conditions of a genuine technical revolution in all branches of the national economy.

Mechanization was started in China in a number of branches of industrial production which were not mechanized in the past (coal and timber-cutting industries, smelting, etc.). Old industrial enterprises are being reconstructed through the introduction of the newest production techniques (more powerful and highly efficient machines, elements of automatic technique) and continuous processes of production.

The most important enterprises being built now are supplied with the most modern machines and equipment from the Soviet Union, the German Democratic Republic, Hungary and some countries of the socialist camp. At the same time the needs of the national economy for machines and equipment are beginning to be met to a growing degree by China's own production. During 1958 the machine-building industry of China will produce 80,000 machine tools.

The machine builders of China must further master the technique of producing heavy and precision machine tools, various instruments and electronic devices and other products. In the field of designing machine tools, machines, and instruments, the machine builders are gradually turning from the copying of foreign models to improving them and creating their own. Thus, at the Shanghai machine tool plant it is planned to design and construct during 1958 alone more than 100 machine tools of high precision, 40 of which will be made on an experimental basis.

As a result of industrialization and the development of the technical revolution in the country, a number of new branches of machine building came to being. Old China could not even dream of them; for instance: motor-car and tractor construction, aircraft construction, a radio-technical industry, construction of precision instruments, etc. The oil production and oil refining branches of industry were created almost anew. The realization of the technical revolution will require further powerful development of these branches, as well as the founding of a number of new ones.

Electrification, which is attained in China mainly by building hydroelectric power stations, plays an enormous role in the realization of the technical revolution. The potential reserves of hydro-energy in China are estimated at approximately 540 million kilowatts. One should bear in mind that hydroelectric stations can be built quite economically on the basis of the large-scale irrigational works carried on in the CPR. At the same time the construction of terminal power stations is also carried on on a large-scale in the CPR.

During the second session of the Eighth Congress of the CP of China the need to electrify all towns and villages of the country was stressed. According to the Congress proposals for the development of the national economy of the CPR during the Second Five-Year Plan it was planned to increase output to 40-43 billion kilowatt hours of electric energy by 1962, i.e. to a sevenfold increase above 1952. Now the task is set to increase the production of electric power by the end of the Second Five-Year Plan to 74 billion kilowatt hours. The task set by the CP and the Government of People's China, is being fulfilled successfully. In 1958 — i.e. the first year of the Second Five-Year Plan — electric power stations with a capacity equal to that of all power stations put into operation during the first years of the First Five-Year Plan (2.28 mil. kw) will be put into operation. According to the data of the Ministry of Water Resources and Electric Power of the CPR, during the current year 188 large-scale projects for the production and transmission of electric energy were being constructed and many of them are already in operation. On the Yangtze River and its tributaries, planning and prospecting work connected with the building of 12 hydroelectric power stations is going on. The plan for the complex utilization of the hydraulic resources of the Huang-ho River contemplates the construction of 46 hydraulic units. At present a large-scale hydroelectric station "Sanmynsia" with 1,100,000 kw and "Sinantsia" with a capacity of 580,000 kw and a number of others are being built on the Huang-ho River.

The movement for the building of small hydroelectric stations in rural regions of the country has acquired broad dimensions. In the very near future thousands of such stations will be built in China. The aggregate capacity of rural power stations will reach 15 to 18 million kilowatts. This will be considerably more than the total capacity of all power stations put into operation during the years of the First Five-Year Plan. The newspaper Jenmin-Jipao pointed out that under conditions of completed socialist reorganization of China's agriculture the task of electrification of villages all over the country can be accomplished in a short time.

The "chemicalization" of the natural economy of the CPR, as the most important goal of technical progress, is slowed down by inadequate development in some important branches of the chemical industry. If China were to overtake the US in production of chemical fertilizers in the near future (by the end of the Second Five-Year Plan), considerable effort would be still needed to overcome the problems of supplying the national economy with the products of basic chemistry.

To assure fulfillment of the exceptionally rapid tempo of economic development of the country, in accordance with the tasks set, the CP of China, utilizing the great advantages of socialist production relations, is mobilizing all the manpower and material resources of the Republic. The profound knowledge by the CP of the economic means and needs of the country, the necessity for careful spending of the means,
the existence in China of rich reserves of various usef
minerals and the colossal labor resources have made p
sible the pursuit of the course of simultaneous develop
of large, medium and small-scale industries — metallu
cal, coal, chemical, building-materials, etc. The exten
building of medium and small-scale enterprises in Chi
was conditioned by the inadequacy of means assigned fo
capital construction. There is a surplus working forc
a shortage of qualified cadres: machine-building is not ye
veloped adequately in the country; transport is not yet dev
industrial reserves of various mineral raw-materials ar
prospected. Small enterprises do not require large capita
vestments or considerable amounts of work on prospectin
exploitation of raw-material resources. Construction o
small and medium-sized enterprises puts new producti
units into operation much sooner and gains essential time.

Both the urban and the rural population participates
building small-size enterprises. Many agricultural pr
ing cooperatives and people's communes build their ow
small factories and mines. The broad development of l
industry — realized under conditions of centralized lea
ship and planned national economy — is an important fa
in accelerating the industrialization of the country, the
mechanization of agriculture and the gradual eliminati
differences between town and village.

***

The productive forces of agriculture in People's Chi
especially during the recent years, developed to a degr
unheard of in the past, thanks to the radical socio-econ
transformation in agriculture to the carrying out of ag
ian reform, the mass cooperation of peasants, the crea
of large-scale state agricultural enterprises (state far
machine-tractor stations, agricultural engineering stat
and the extensive realization of measures designed to i
prove agricultural production methods. The potential y
of the majority of crops increased quite considerably a
so did gross yields. In 1957 production of grain amoun
to 185 million tons.

Depending upon successes already achieved, the Cen
Committee of the CP of China worked out the draft of t
"Basic Principles of Development of Agriculture in the
CPR During 1956-1967." The second session of the Ei
All-China Congress of the CP of China discussed for t
second time the revised version of these "Basic Princ
in connection with the general completion of cooperati
agriculture and the sharp advance in agricultural prod
tion during 1958, and introduced necessary changes in

At present the main task for Chinese agriculture is
struggle to raise the yield of agricultural crops per u
cultivated area. This task can be solved only on the ba
of considerably improving agricultural production tech
niques. The principal goals of technical progress in a
culture, which were determined during the First Five-
Year Plan and now have acquired an unheard of scale,
in many respects new expression, consist of the follo
construction of irrigational units, improvement of agr
tural technique on the basis of utilization of improved
plements, learning new methods of agricultural techni
more extensive use of fertilizers, and the drawing in
virgin lands into the national economy.

It is known that building installations for water serv
have exceptionally great importance in China. They a
designed to prevent floods which inflict enormous dam
to agriculture, industry and the population; to extend t
areas of irrigated fields in order to raise the yield of
agricultural crops, to improve conditions of navigatio
water supply and provide cheap electric power throug
building of hydroelectric stations.

On the eve of the Second World War the area of irrigated
nds in China amounted to 16 million hectares. During
949-1957 the irrigated lands were increased by 18.1 mil-
on hectares. The development of irrigation since the end
f 1957 was particularly extensive. During the period be-
veen October 1957 and July 1958 alone the total of irrigated
nds expanded by 28 million hectares. Simultaneously
melioration of 16 million hectares of low lands was
ccomplished. In October 1957, between 20 and 30 million
en were occupied daily on irrigation work, while begin-
ing January 1958, up to 100 million men. By September
958 the area of irrigated lands amounted to 64.7 million
ectares, i.e. 57% of the entire area of cultivated lands in
e country.

The utilization of better agricultural implements is play-
g an important role in the struggle to raise agricultural
roduction. During the transition period and early years of
e First Five-Year Plan an increase in the number of the
sual implements of old models was characteristic, although
hortages by the peasantry were experienced. According to
e materials in the 1958 All-China Exposition of Agricul-
ural Machinery and Implements, the number of agricultural
mplements of old types increased by 59 million between
950 and 1954. During the First Five-Year Plan the produc-
on and use of improved agricultural implements (with
raft animals) expanded greatly (iron ploughs, seeding ma-
hines, simple threshing machines, etc.). At the same
me production of new agricultural implements was organ-
zed. By 1957 almost ten million new agricultural imple-
ents were manufactured in China and delivered to the
ural economy.

The movement for improving old and creating new agri-
ultural implements now has assumed increasing import-
nce. Over the first half of 1958 some 90,000 different
pes of agricultural implements were perfected and more
an 60 million of them distributed. Implements which are
nproved and adjusted to local conditions increase labor
roductivity by 15 to 20%, and some of them by 3 to 4 times
r even several tens of times. At present the central task
the development of mechanization and semi-mechaniza-
on of agriculture is the installation of ball-bearings for
l implements and vehicles, and the replacement of yokes
ith wheelbarrows; this will increase labor productivity
3 to 4 times. The mechanization of agriculture and in-
usion of new implements also helps in solving the prob-
m of a shortage of labor, which never arose in the old
hina. The shortage of the working force became percep-
le in connection with the vast range of irrigational works,
e building of industrial enterprises, by the cooperatives,
e construction of roads, extraction of useful minerals,
c.

Of great importance in the progress of agriculture is the
tensive enrollment of women in agricultural production.
order to free women from housework, a network of in-
itutions for children and dining-rooms are being opened.
a number of provinces of China the overwhelming ma-
rity of children already are provided with nurseries and
ndergartens, while more than 70% of the rural population
ceive their meals in communal dining-rooms.

In countries with high levels of mechanization of agricul-
al production, tractors are the basic motive mechanism
agriculture. Raising the number of tractors in China's
riculture is one of the main tasks in the field of mechani-
tion of agricultural production. During the First Five-
ar Plan 26,700 tractors (in 15 ton units) were imported
China from countries of the socialist camp. Tractors
re used mostly by state farms and machine tractor sta-
ns. From the start of the Second Five-Year Plan China mastered production of its own tractors. Thus, along with the further improvement in agricultural implements driven by animals, tractors are being used in the agriculture of China in growing numbers.

Tractor production in China is characterized by output of different types of tractors, adapted to local conditions and designed for different kinds of work. During 1958 more than 180 types of experimental tractors were designed and manufactured. Machines are adapted for work on irrigated fields, water meadows and mountainous regions, and tractors suitable for both dry farming fields and water meadows are produced. What is common to all types of tractors is their versatility: practically all can be used for ten and more kinds of agricultural work, and some of them for more than 50 types of work. Tractors are manufactured in a number of regions of the country, in particular in Sinkiang, Yunnan and Inner Mongolia, and they are produced not only in large-scale plants, but also in small-size factories and even in machine-shops.

To raise production of agricultural products, improvement of agricultural technique for the cultivation of agricultural crops is very important. Raising the yield of grain and other crops is enhanced by dense sowing extensively used in China, i.e. sowing in narrow rows with a greater seed norm. The new trend in agricultural technique which plays an important role in raising agricultural production is deep ploughing which permits a manyfold increase in the yield of grain crops. In three years or somewhat longer it is planned to introduce in China the deep ploughing of all cultivated lands (48 to 64 cm. deep). The introduction of deep ploughing will also improve the structure of the soil.

One of the forms of struggle for raising the gross harvest of agricultural crops in China is the expansion of areas used for repeated sowings. The condition of the soil and climate in many regions of the country allows the gathering of 2 to 3 harvests per year or three harvests in two years. In the draft of the "Basic Principles for Development of Agriculture of the CPR During 1956-1967" tasks were established raising the number of sowings during the year from 120 to 230 according to the peculiarities of different agricultural regions of the Republic.

Raising the yield of agricultural crops is largely determined by the utilization of considerable amounts of fertilizers. Recently many small-size factories for the production of fertilizers by primitive methods were built in China. During the period between October 1957 and June 1958 20 billion tons of various fertilizers, mostly silt, composts, etc. were used on the country's fields.

At present a mighty movement is developing all over the country for the fulfillment before schedule of indices set by the draft of "The Basic Principles of Development of Agriculture of the CPR During 1956-1967." For instance, the provincial committee of the CP of China in Chekiang originally planned to fulfill in 5 to 7 years the task set by this draft and to achieve an average grain yield of 800 "tsins" per "mu" (60 centners per hectare): of cotton — 100 "tsins" per "mu" (7.5 centners per hectare); seeds of rape — 200 "tsins" per "mu" (7.5centners per hectare), and to increase the number of swine to 35 million. The broad masses of workers, carried away by enthusiasm for socialist construction, advanced a counter-slogan: fulfill the basic tasks of the draft in three years.

The heroic efforts of the Chinese peasantry, led by the CP, directed toward achieving a sharp increase in agricultural production, yielded remarkable results. In 1958, in spite of unfavorable climatic conditions in a number of provinces, a record crop of wheat was harvested in the CPR. China is already ahead of the US in the production of wheat, and occupies second place in the world, after the USSR, among the chief wheat producing countries.

The average yield of grain crops in China increased from 10.5 centners per hectare in 1949 to 15.3 centners per hectare in 1957. In the current year, as a result of an unusual advance in agriculture, the average yield of grain will increase to approximately 30 centners per hectare. Out of the total area of 26.6 million hectares under wheat, on over 666 thousand hectares more than 37.5 centners per hectare was harvested, and on 66,600 hectares — more than 75 centners per hectare. In some places such record harvests as 225 and 375 centners per hectare and even 549 centners were gathered per hectare. The harvest of rice was considerably higher this year. Four provinces — Honan, Anhwei, Sharsi and Hopei — succeeded in gathering an average harvest of early rice of 75 centners per hectare. In Honan province the average yield of early rice was 104.4 centners per hectare. In two counties the yield of early rice was 750 centners per hectare.

The gross harvest of grain crops in China in 1958 will be more than 700 billion "tsins" (350 million tons), i.e. twice as large as in 1957. This means an average of one thousand "tsins" (500 kilograms) per capita of population. The harvest of cotton will amount to 70 million "dan" (35 million tons) i.e. it will be two and a half times greater than in 1957. It is assumed that by 1959 the complex measures planned for further progress in agriculture will have been accomplished and it will be possible to gather from most of the cultivated areas 75 centners of grain crop per hectare and a gross of 500 million tons of grain (750 kilograms per capita). The gross harvest of cotton will reach five million tons, i.e. 7.5 kilograms per capita.

The sharp progress of agriculture is accelerating the industrialization of the country and the development of the entire national economy. It is promoting improvements in the standard of living of the people and strengthening the union of peasants and workers.

***

The general line of the CP of China in the building of socialism assumes the realization of the cultural revolution simultaneously with the technical revolution. If the technical revolution means radical changes in the means of production used and utilization everywhere of machinery, then the aim of the cultural revolution is to raise the qualifications of the broad masses of toilers by providing general education and special knowledge. Thus, the cultural revolution promotes the realization of the technical revolution.

The CC of the CP of China and the State Council of the CPR set up the following tasks: eliminate illiteracy in the country in three to five years; establish universal elementary education; introduce secondary schools in all agricultural cooperatives; provide space in nurseries and kindergartens for all children of pre-school age. The secondary schools and schools for higher education should be developed more rapidly in order that in some 15 years basically all youngsters and adults in the country who so desire and can fulfill the conditions can receive a higher education.

To eliminate illiteracy in China 90 million people are studying in schools at present. The number of illiterate workers and employees up to the present has diminished to 41% as against 80% before the liberation of the country. Considerable work is being carried out to reform the Chinese written language. A simplified script of hierogliphics was introduced, and more general use of the Peking dialect for the entire country is being promoted. The project for transcription of the Chinese written language, based on the Latin alphabet, was approved.

All over the country both state and cooperative elementary and secondary schools have been founded. By the e of August, 1958 almost 120,000 secondary schools had b founded by local organs and the popular masses. On the i tive of local organizations institutes and universities in provinces, towns and counties are being founded. The n ber of institutions of higher learning is already over on thousand. This promotes the successful solution of the of creating in People's China its own intelligentsia fro working class and toiling peasantry.

In rural communities of the CPR mobile units of cine libraries and other units of culture have been establishe Radio transmitters and telephone networks are being established in rural regions. A network of experimenta agricultural stations is being developed.

Public health service is being rapidly developed, espe ly in the rural regions. The draft of "Basic Principles Development of Agriculture During 1956-1967" contemplated a radical improvement in all aspects of the livin standard of the 500 million peasants. The agricultural producing cooperatives are improving the housing of pe antry according to plan, taking into consideration availa means. A grandiose program of sanitary-hygienic meas ures in the Chinese villages is being carried on. In the near future such diseases as schistamatos, philarios, b fever, etc. will be eradicated.

Very important for the realization of technical and cu tural revolution is the development of science and te nology, as well as the inclusion of their achievements i production process. The CP of China and the governme People's China attach great importance to the developm of all branches of contemporary sciences. A 12-year p has been worked out for the development of scientific r search in the country; its principal aim is to attain the of the most advanced world sciences. Particular attenti is given to the training of scientific workers and the ca on of research in such fields of knowledge as nuclear a chemical physics, radio-technique and electronics, the chemistry and physics of polymeric compounds, geoche istry, biophysics, etc. During the last few years a num of new scientific organizations, institutes and laborator of the Chinese Academy of Sciences were created and a number of scientific units were founded in the province During the first half of 1958 alone, besides the existing four branches of the Chinese Academy of Sciences (in chow, Wuchan, Kweichoro and Sinkiang) five more bran were founded in the provinces of Shensi, Chekiang, Kia Kiangsi and Tsilin. In addition to scientific-research i stitutions and stations, scientific bases are being found in smaller administrative units and cooperatives. The tent of this work can be judged by the fact that in the pr ince of Chekiang 10,000 scientific-research units were organized.

In the acceleration of socialist construction in Peopl China, the rapid development of its productive forces, the securing of scientific and technical progress, an im portant role is played by the all-round political, econo and cultural collaboration of the CPR with the countrie the socialist camp, and first of all with the Soviet Unio With the assistance of the USSR and countries of peopl democracy (German Democratic Republic, Czechoslov etc.) hundreds of industrial and other enterprises have and are being built. Contacts of the CPR with the USS and countries of people's democracy in the field of sci and technique are constantly expanding. Early in 1958 agreement between the CPR and the USSR was conclud concerning joint work during 1958-1962 in solving 122 portant scientific-research problems. These problems are of great importance for China. Agreement was als ached on strengthening direct liaison between the scien- ic-research institutions of these countries. A vivid ex- nple of the close collaboration between Chinese and Soviet ientists was the construction in the CPR, with the assist- ice of the USSR, of an experimental atom-reactor, which now in operation. This will have an important place in e development of research by Chinese scientists in the eld of utilization of atomic energy for peaceful purposes. ne scientific contacts of scientists of the CPR with ientists of the GDR, Czechoslovakia, Hungary and a num- r of other fraternal countries are expanding. The close ollaboration of the CPR with the countries of the socialist mp is a solid guarantee of success in building socialism d strengthening its might and independence.

***

The general line of the Communist Party of China in ilding socialism is based on objective laws which deter- ine the creation of socialist methods of production — cialist production relations and productive forces cor- esponding to them. In People's China the socialist produc- on relations became the dominant ones. At the same time ey are only recently established and are not completely rmed; therefore, naturally, completion of the creation of cialist methods of production will be tied up with the rengthening and development of the victorious socialist oduction relations and their further perfection. Comrade ao Tse-tung in his work "The Question of Properly Re- lving Contradictions Among the People" said: "The cialist order in our country was created only recently, s establishment is not yet complete and it is not yet strong ough. In the mixed state and private industrial and trade terprises the capitalists still get a fixed interest, i.e. ere is still some exploitation; from the point of view of nership, enterprises of that type are not yet quite social- t in character."

In industry, the further perfection of socialist production lations, under conditions peculiar to China, will develop ong the line of socialist reorganization of state-private terprises and their transformation into state enterprises. is will be accompanied by discontinuing interest payments capitalists.

In agriculture one of the vivid expressions of the further rfection of socialist production relations is found in the eation of people's communes.

The higher-type cooperatives have already played a de- sive role in developing agricultural production in the R. At the same time in connection with the sharp ad- nce in all branches of agriculture, the carrying on of ormous common work on irrigation and amelioration of ils, afforestation and the growing use of tractors, it be- me clear that the existing organizational forms of agri- ltural production, such as cooperatives, required further rfection. In every cooperative, as an average for the ole country, slightly more than 100 peasant holdings were luded. The cooperatives were short of workers, money material means for carrying on the more or less large- le work and for purchasing machines. Thus, in the ocess of capital construction in agriculture, in the strug- for better harvests, the broad masses of peasantry be- to collaborate on a large scale, breaking through the operative, county and other boundaries.

The construction of small-size metallurgical plants, l pits and other enterprises of local industry was also yond the power of individual cooperatives. The electri- ation of villages and building of power stations, improve- nt in the work of transport and communication, and rough development of education and public health serv- s required a greater unification of efforts of the Chinese people and greater concentration of means and qualified cadres. Thus, the struggle which was developing for the realization of the general line in the building of socialism (advanced at the second session of the Eighth All-China Congress of the CP of China), i.e. the accomplishment of technical and cultural revolutions, brought about the formation of people's communes on the basis of strengthening the cooperatives.

As is pointed out by the Chinese press, the unusually high harvest of 1958 and the rapid development of industry in the cooperatives helped create a material basis for the people's communes. An important preliminary to creating communes was the steadily growing political consciousness of the Chinese peasantry.

In September 1958 the CC of the CP of China adopted the resolution entitled "Creation of People's Communes in the Villages." It was stated that the people's communes are organizational forms which can secure a higher level of socialization of production. Industry, agriculture, trade, education and military affairs (people's militia) form a unified whole in the communes. At present it has been found to be most expedient to form one commune per rural district, composed of approximately 2,000 farmsteads. Where the districts are large, several communes can be formed. Sometimes communes include 6,000 or 7,000 farmsteads, and sometimes even more than 10,000.

At present, in the communes which have been organized, elements of national and collective ownership are found. The national ownership will constantly develop and strengthen in the communes and eventually will replace collective ownership. The transformation of collective ownership into state (national) ownership is a complex process. In certain regions such a transformation can be realized in a comparatively short time — in three or four years — in others it may develop rather slowly and take five to six years or even more.

Many aspects of ownership relations in the communes reflect this transfer from cooperative ownership to national ownership. The basic means of production in the communes, as a rule, are collective property. But in a number of cases part of the basic means of production actually represents national property.

There are also some communes which are created on the basis of combining state farms with agricultural productive cooperatives. In a few people's communes (province of Honan) all the basic means of production are national property.

In the communes based on collective ownership, the entire property of the cooperatives was transferred to the commune. Payments made to members of the cooperatives for their shares are entered, as before, to the account of the communards without adding interest. Plots of land in private use, livestock and fruit trees will become eventually the social property of the commune. At the same time in the resolution of the CC of the CP of China on "Creation of People's Communes in the Villages" it is indicated that the solution of the question concerning payments for shares, land plots and fruit-bearing trees can be deferred for one or two years.

The people's communes are expected to develop a diversified economy (including tillage, stock-breeding, industry and trade) on the basis of plans coordinated with state planning organs.

The system of organization of labor in the people's communes and the management of their activities have specific traits. For instance, in the model charter of the people's commune "Weihsing" ("Sputnik"), founded in Honan province, it is stated that for the better organization of labor and the management of the entire production process the commune is subdivided into several productive columns (battalions), which in turn are subdivided into several productive brigades (sections). The productive column is an accounting unit. The main form of the organization of labor in the commune is the productive brigade.

Simultaneously with the organization of labor and management in the communes the problems of creating a people's militia are solved. Comrade Mao Tse-tung has indicated that the organization of units of a people's militia deserves approval. It is necessary to expand them. The unit is a military organization, a labor organization, an educational organization and a sports organization.

The resolution of the CC of the CP of China states that after the creation of communes, in order to avoid an unfavorable effect on production it is not correct to hurry in changing the existing system of distribution of income. Where necessary, it is possible to transfer to a system of wages; where no such conditions exist, the system of paying per working day is preserved temporarily. In order to free women from domestic work, public dining rooms, children's nurseries and sewing-shops are organized in the communes and, as a rule, women are found in every productive brigade. Wages of workers in these institutions are paid by the commune. Payments for servicing the communards is determined on the principle "no loss, no profit."

The entire system of management in the communes is built on a democratic basis. The creation of larger social economies required more centralized management within the limits of the districts. For this purpose the organs of government are combined with the management of the communes. The supreme organ of management of the commune is the assembly of the representatives of the commune, where all the most important questions are discussed and decided. The Party committee of the district is the Party committee of the commune, and the "people's committee" of the district is the people's committee of the commune.

Under the conditions prevailing in the CPR, the people's commune is the best organizational form. It will become the basic social unit in the future communist society. Creation of people's communes is the necessary basic course directed toward the management of peasants in the accelerated building of socialism, completing this ahead of time, and the gradual transition to communism. The people's communes are created in China on the basis of conscientious and voluntary decisions of the mass of peasants through broad exchanges of opinions and discussions.

The fuller use of possibilities created through the functioning of the law relating to planned and proportional development of the national economy becomes an important task in strengthening socialist production relations in People's China, and for improving planning and management of the national economy. In the CPR the measures for the perfection of the management of industry, trade, finances and other branches of the national economy are being accomplished extensively. This is being done in conformity with the task of properly combining centralized management with the development of initiative in local organs, drawing the toiling masses into the management of the economy on the basis of Lenin's principles of democratic centralism. Recently the majority of enterprises in the light industries and food industries, which in the past were subordinated to the central organs, were transferred to the jurisdiction of local organs. Enterprises with complicated techniques and experimental production were not transferred to the communes. By the middle of June, 1958 some 80% of the enterprises and institutions which were under the jurisdiction of industrial ministries, were transferred to local organs. As
a result of the transfer of enterprises to the local orga
the efficiency of their operation improved considerably
the utilization of local resources became more rational
Certain functions of management, finances and trade we
also transferred to local organs.

One of the important conditions for strengthening soc
production relations is the movement for improving the
of work.

In old China private ownership by the gentry and capi
ists caused hostile relations not only directly between e
ploiters and exploited, but also between the administrat
managing apparatus and the producers. The class contr
also were reflected in the relations between the rank an
file of white collar and manual workers.

After the realization of socialist reorganization in the
field of ownership of the means of production the above
contradictions were generally eliminated. But, as repo
in the Chinese press, some administrative and technica
workers are still infected with a bureaucratic spirit of
scorn towards their duties to the rank and file workers.
The struggle against these negative phenomena in the
process of improving the style of work further strength
the confidence of the masses in the Communist Party a
Government of the CPR. It serves to create conditions
under which the workers and peasants approach sociali
labor as the masters of their country and of their enter
prises. Thus, the struggle against bureaucratism in administration is a part of the struggle for establishing
genuine socialist production relations between the work
of the administrative apparatus, white collar workers,
the mass of workers and peasants, i.e. relations of frie
collaboration and mutual help.

In pursuing the general line in building socialism, the
CP of China relies on the creative initiative of the broa
masses of people, constantly guided by public opinion.
This is the concrete expression of the line of the masse
in socialist construction, worked out by the Party.

The gigantic successes of People's China in building
socialism stir anger and hatred among the world's reac
tionary forces. The ruling circles of the US cherish wi
plans for the re-establishment in China of the power of t
bankrupt clique of Chiang Kai-shek which is being kept
the bigwigs of Wall Street. Carrying on their aggressiv
policy, the American imperialists have occupied the pr
mordial territory of People's China — the island of Tai
have concentrated in the region of the Taiwan Strait lar
units of their naval and air forces and threaten the Chi
people with the use of atom and hydrogen weapons. The
naval vessels and aircraft of the US are systematically
vading the territorial waters and air space of the CPR.
Every new day confirms the profound justice of the stat
ment made by the Chairman of the CPR, Comrade Mao
tung, during the Supreme State conference: "American i
perialists believe that they always benefit from a strai
situation. But, as facts show, the strained situation cre
by the United States led to something different from wh
the Americans wanted. Actually it mobilized the people
of the whole world for the struggle against the Americ
aggressors."

The mighty Soviet Union is a faithful friend of People
China. In connection with the adventurous policy of the
toward People's China the government of the USSR bro
to the attention of the ruling circles of the US the dang
the situation created by them in the Far East. The Sov
Government declared that the interests and security of
People's China are inseparable from the interests and
security of the USSR. The message sent by the head of

(Continued on Page 17)

. *Nemchinov:**

elationships of Expanded Reproduction

To analyze the structure of the national economy and the
anges occurring therein, economic statistics erects bal-
ces of the national economy expressing quantitative pro-
rtions existing in expanded reproduction, its concrete con-
tions, and the results thereof.

The theoretical foundation of balance structures is a dia-
am of the reproduction of the social product characteriz-
g the processes of repayment of the material costs of
cial production and the formation and distribution of
wly-created value, from which there is differentiated, in
rticular, the cost of the surplus product, assuring further
pansion of the scale of social production, and consumption
the unproductive sphere.

The first economist who attempted to compile a general
agram of the process of social reproduction was the out-
anding French economist Francois Quesnay, who pub-
shed, in 1758, his famous "Economic Table." Karl Marx
lled Quesnay's Economic Table an idea of genius, although
subjected its erroneous hypotheses to a scientific criti-
sm, particularly his explanation of the origin of surplus
lue. Proceeding from the standpoint of the Physiocrats,
esnay held that surplus value is a gift of nature, and is
nsequently created only in agriculture. The class of in-
strial workers and artisans only replaces the process of
oduction, the material expenditures of production, and the
eans of existence used by this class.

The genius of Quesnay's idea lies in the fact that he at-
mpted to find a theoretical explanation for the structure
the national economy on the basis of the laws of the
ocess of reproduction of the social product. Quesnay's
rk is also significant because in it the innumerable in-
idual acts of economic activity are examined in their
ality, in their unity, as relations between the major
sses of society. An effort is made at a quantitative
aracterization of the proportions existing in the circula-
n of the social product between producers and consumers,
ween the class of producers and the class of owners.
is scheme is also accurate in that the movement of
ney is explained as being in its entirety conditioned by
production and circulation of commodities, that is, by
process of circulation of capital.

n a letter to F. Engels of July 6, 1863, Karl Marx first
forth his approach to the problem of reproduction,
idly founded and truly scientific, and suggested a diagram
t would illustrate this process of social reproduction (1).
he economic table of Karl Marx, the dual aspect of his
mination of the process of the formation of the social
duct and the national income was fundamentally new.
ere is the value aspect (from the viewpoint of the creation
nd reimbursement for the individual portions of the value
he product — surplus value and the portions returning
costs of constant capital and of variable capital), and the
ect of material substance, in connection with which all
products of production are divided into means of pro-
tion and the necessities of life for consumption.
he economic table developed by Marx in 1863 depicts
simple reproduction. Later, in Volume 2 of "Capital," Marx developed in detail his diagram of simple reproduction, and supplemented it by a diagram of expanded reproduction, which was also plotted on the basis of a twofold examination of the elements of production — value on the one hand, and the structure of production in terms of material goods on the other. A new significant element in this analysis is the division of surplus value in the diagrams of expanded reproduction into the accumulated and consumed portions thereof. Analyzing the conditions of circulation and recompense of the individual portions of the social product in terms of cost and in terms of their composition as natural substances, Marx formulated a specific expression for simple reproduction, in accordance with which the material costs in the sphere of the production of consumer goods (IIc) are equal to the income of society created in the sphere of production of means of production I (v + m). Under the conditions of expanded reproduction, however, the income of society I (v + m) created in the sphere of production of means of production must be greater than the material costs (IIc), in the sphere of production of consumer goods. V. I. Lenin ascribed great significance to this hypothesis, and held that the relationship between I (v + m) and IIc will be of significance "even under pure communism."(2) V. I. Lenin also noted another equation pertaining to simple reproduction and formulated it as a law as follows:

". . .The sum of all values newly produced in the course of a year (in both subdivisions) has to equal the gross value of the product existing in the forms of means of consumption: I (v + m) + II (v + m) = II (c + v + m)."(3)

Karl Marx provided numerical examples of diagrams of reproduction only for conditions in which the organic composition of capital was stable. In these examples the surplus value accumulated within each subdivision is divided into the increase in constant and variable capital occurring in a definite invariable ratio equal to the organic composition of capital in the given department at the beginning of the production cycle.

During the first quarter of the twentieth century, a discussion took place in Marxist literature on the matter of the possibility of applying the Marxist diagram of reproduction to conditions of increase in the organic composition of capital. Certain economists doubted even the possibility of utilizing the methodological foundations of the Marxist table for analysis of expanded reproduction occurring under conditions of technological progress, and an increase in the organic composition of capital. Rosa Luxembourg, for example, wrote:

"Thus, if we assume in accordance with the diagram of Marx that the expansion of capitalist production always takes place only out of surplus value carried forward in the form of capital; and further, which amounts simply to another aspect of the same assumption, that the accumulation in one department of capitalist production is in the most rigorous relationship to accumulation in the other department, the result is that no change in the technical foundations of production is possible (inasmuch as it is expressed in the ratio of c to v.)"(4)

---

mber of the Academy.

V. I. Lenin provided the solution to this problem in his work "On the So-Called Market Question," written as long ago as 1893. This study examines a variant of the scheme of expanded reproduction under conditions of technical progress; that is, of more rapid increase in the composition of the social costs of production in part c as compared with v. As we know, V. I. Lenin classified the sphere of production of means of production into two parts: production of means of production for production of means of production, and production of means of production for production of means of consumption. Analysis of this variant of the diagram of expanded reproduction enabled V. I. Lenin to formulate yet another and most important law, to wit: that in the presence of technological progress expanded reproduction requires the production of the means of production to proceed more rapidly than growth in production of the means of consumption; moreover, within the sphere of production of means of production, more rapid production of means of production for the needs of this sphere occurs than production thereof for the sphere of production of means of consumption.(5)

Lenin's investigations are of enormous scientific and practical value. In the work referred to, Marx's diagram of reproduction was supplemented by Lenin in the form of a diagram of the formation of the market. Lenin, using a brilliantly elaborated hypothetical example, showed that a considerable expansion of the market is possible even under conditions of simple reproduction. This growth is due to the transformation of natural economies into commodity economies (a growth in the social division of labor and in specialization), and by the transformation of commodity economies into capitalist economies (proletarization of the direct producers).

The laws of expanded reproduction established by V. I. Lenin were of exceedingly great importance for the planning of the socialist industrialization of the Soviet Union. By means of these laws the Communist Party provided, within the briefest historical period, for the transformation of our formerly backward agrarian country into a powerful and advanced industrial power. Lenin's hypothesis with regard to the favored growth of production of means of production was completely confirmed in the course of the socialist industrialization of the country. It is of enormous significance for solution of the main economic problem of the Soviet Union as well.

The diagrams of expanded reproduction developed by Marx and Lenin constitute theoretical foundations for the development of the summary and planned balances of the national economy, which play an important role in practical planning of the socialist economy. The balances of the national economy represent a concretization of the diagrams of expanded reproduction of Marx and Lenin. These balances characterize in concrete values the processes of development of the socialist economy, and constitute summary economic tables for the land of socialism.

Marx employed the media of mathematics to analyze simple and expanded reproduction. He used equations and inequalities to express quantitative regularities. Of fundamental importance are the equations characterizing the relationship between the transferred value of means of production embodied in means of consumption IIc; and the newly created value in the sphere of production of the means of production I $(v + m)$. For simple reproduction the ratio is the following: IIc = I $(v = m)$.

For expanded reproduction we have the following inequality: I $(v + m) >$ IIc.

This inequality may be converted into an equation for balanced expanded reproduction: I $(v + m)$ — IIc $= qm$, where qm is the accumulated portion of the surplus proc (q being less than unity).

These equations may readily be derived from an exam tion of the following matrix, constituting a variation of sorts of the generally known Marxist diagrams of reproduction:

$$\left.\begin{array}{llll} c_1 & v_1 & m_1 & P_1 \\ c_2 & v_2 & m_2 & P_2 \\ c & v & m & P \end{array}\right\} \quad \text{Current cycle of production}$$

$$\left.\begin{array}{llll} c'_1 & v'_1 & m'_1 & P'_1 \\ c'_2 & v'_2 & m'_2 & P'_2 \\ c' & v'' & m' & P' \end{array}\right\} \text{Next cycle of production}$$

The significance of these symbols is the following: th subscript numeral 1 represents the sphere of productio of means of production; the subscript numeral 2 represe the production of means of consumption. Latin letter c represents the cost of the means of production expended v, the wage fund; m, the surplus product; P, the social product, which is equal in value to: $P = c + v + m$.

In simple reproduction, production of the means of pr duction must completely replace current expenditures o means of production in both departments, i.e., c_1 and c_2 consequently: $c_1 + c_2 = P_1 = c_1 + v_1 + m_1$.

Subtracting c_1 from both sides of this equation, we obtain: $c_2 = v_1 + m_1$.

In expanded reproduction, the product of Department I P_1, must provide not only for replacement of expanded means of production, but must cover the difference betw c' and c; or, in other words, must contain resources of means of production for expanded production in the next cycle of production. The product of Department II, P_2, r in turn cover not only current consumption, but expansio of the wage fund $(v' - v)$ in the following cycle of reproduction.

If we analyze the numerical examples in the diagrams Marx and Lenin, it is easy to determine that they placed two very specific equations at the base of their structur of calculations. For expanded reproduction Marx and Le assumed that the magnitude of the transferred value embodied in the total social product to be created in the ne subsequent cycle of production must be equal to the enti value of products produced in the current period in the form of means of production, i.e.: $c'_1 + c'_2 = c_1 + v_1 +$

In their numerical calculations they also proceeded fr the assumption that the cost of the product existing in th form of consumer goods must be equal to the cost of the necessary product created in both departments, plus the cost of the surplus product used in the current period as income, i.e.:

$$v'_1 + v'_2 + p_1 m_1 + p_2 m_2 = c_2 + v_2 + m_2,$$

where p_1 and p_2 represent the share of the social produ employed as income in the unproductive sphere.

From the initial equations adduced above, it is easy t derive the fundamental equation for balanced expanded reproduction.

If we equate $p_1 = c'_1 + c'_2$, we obtain: $c_1 + v_1 + m_1 =$ $= c'_1 + c'_2$. (I)

From this we find: $\Delta c = qm = v_1 + m_1 - c_2$, where c is the accumulate portion of the surplus product and Δc the increase in material expenditures. This is the fundamental equation for balanced expanded reproduction.

On the other hand, the social product in Department I (P_2) must provide means of existence for workers in th entire sphere of material production in the next cycle c expanded reproduction $(v'_1 + v'_2)$, and also consumptio the part of personnel of the unproductive sphere (pm). ne increase in the means of existence of workers in the phere of material production is necessary to assure ex- nded production during the next cycle. This increase also omes from the surplus product created in the given initial age of production. Let us designate it as zm. Then $n + pm + zm = m$, in view of the fact that $p + q + z = 1$.

In balanced reproduction the following equation neces- rily obtains: $P_2 = v'_1 + v'_2 + pm$.

rom this we again obtain $v_1 + m_1 - c_2 = qm$, inasmuch $v'_1 - v = v'_1 - v_1 + v'_2 - v_2 = zm$.

Thus, this method also gives us the same fundamental uation for balanced expanded reproduction.

The equation for expanded reproduction we have adduced ows that the exchange between Departments 1 and 2 is lanced if the following equation is adhered to:

$$c'_2 = v'_1 + p_1 m_1 . \qquad (I - A).$$

This equation is readily derived if into equation $= v'_1 + v'_2 + pm$ we substitute the value: $= c_2 + v_2 + m_2$, inasmuch as $v'_2 - v_2 = \Delta v_2 = zm$.

The fundamental equation for balanced exchange is ad- ered to by Marx and Lenin invariably in all their numerical amples. This equation is of general significance both for pitalist and socialist expanded reproduction, inasmuch as is derived from the general substantial material struc- ral proportions existing in production.

Change in the method of production and in the class ructure of society is accompanied by change in the social d economic nature of the corresponding portions of the cial product, but the necessity remains for definite antitative relations between them. Division of the social oduct into tools of production (means of labor), objects labor, and objects of consumption, characterizing the bstantial (material) composition of production, naturally lds true for both the capitalist and the socialist methods production.

However, division of the social product into the elements value is significantly different under the conditions of pitalism and socialism. Under socialism in place of divi- on into constant capital, variable capital, and surplus lue, the surplus product is divided into the following three mponents: replacement of material expenditures, neces- ry product, and surplus product, of which the last may her be consumed or accumulated. The fundamental uations for balanced expanded reproduction (I and I — A) duced above thus hold for socialist expanded reproduc- n if, of course, we do not lose sight of the new social and onomic content of the element of the value of the social oduct.

Thus there are specific equations for simple and ex- nded reproduction. Consequently, balanced expanded production is capable of proceeding only under very spe- ic relationships of the components and the elements of social product under specific ratios characterizing the ucture of social production.

Balanced simple, or balanced expanded, reproduction is by any means possible under each and every conceivable io of the components and elements of the social product. panded reproduction requires a different ratio between elements and components of the social product than does ple reproduction. Balanced expanded reproduction oc- s under conditions of a rigorous mutual relationship ween the elements of the social product and Departments d 2. The objectively determined quantitative relation- existing between the elements of the value of the social duct were not understood by certain theoreticians of ialism. Thus Rosa Luxembourg wrote that Karl Marx's mples contained "mathematical operations with skillfully selected numbers."(6) She asserted that under the conditions of technological progress the process of accumulation encounters "insuperable difficulties within the framework of the Marxist scheme."

Expanded reproduction is characterized by very definite and, at the same time, highly rigid quantitative relationships. Equations I and I — A characterize the conditions required for balance in expanded reproduction.

Under real conditions of economic activity, these requirements are, of course, not always observed. Where private capitalist property rules, violation of these conditions of equilibrium increase constantly, and are then resolved only in the process of economic crisis.

In order to understand the disproportions arising in real economic activity within the process of expanded reproduction, it is necessary to distinguish a number of magnitudes which are identical under conditions of an abstract analysis of balanced expanded reproduction.

First of all we must differentiate between qm and Δc and also between zm and Δv. The values qm and zm characterize the portion of the surplus product actually set aside in the given production cycle for the expansion of c and v in the following cycle. The increase in material expenditures (Δc), and the wage fund of workers in material production (Δv), characterize the difference between these cost elements during the given and the subsequent production cycles. Under real conditions of expanded reproduction the magnitudes (qm and Δc and also zm and Δv) differ. In point of fact, qm, for example, characterizes the portion of the surplus product realized in capital investments, in fixed and circulating funds, and Δc represents the increase in material expenses in which only the difference between the amortized sums in the present and the subsequent production cycle are included in the category of tools of labor. Raw material resources set aside in the present production cycle (in the form of reserve stocks of production) may also not be equal to the increase in the productive consumption of objects of labor (raw material, fuel, etc.), as between the present and the next cycle.

Also to be differentiated are zm and Δv, as the purchasing power of workers in the material sphere of production in the subsequent production cycle may not absorb the reserve stocks of consumer goods set aside during the present production cycle. Moreover, inasmuch as consumer goods that are used up over a long period of time (housing) are at issue, zm includes the total value of new housing construction, while Δv includes only the rent paid for use of new housing actually made available.

It follows from the Marxist theory of expanded reproduction that the present cycle of production creates the material foundation for reproduction on an expanded scale during the next cycle. In terms of means of production, this material foundation is equivalent to the following:

$$P_1 - c_1 - c_2 = M.$$

The value of M characterizes the potential for expanded reproduction of the means of production.

It is easy to see that $M = v_1 + m_1 - c_2$, inasmuch as

$$P_1 = c_1 + v_1 + m_1 \qquad (II)$$

Under conditions of balanced expanded reproduction $M = qm$.

Under conditions of unbalanced expanded reproduction we have the following inequality: qm is greater than M or qm is smaller than M.

In the former case the economic situation resulting is characterized by excessive and, in the latter, by inadequate investment.

The material foundation (potential) for reproduction of means of consumption on an expanded scale may be defined in analogous fashion as $L = P_2 - v_1 - v_2 - pm$.

Substituting in this equation $P_2 = c_2 + v_2 + m_2$ and $M = v_1 + m_1 - c_2$, we finally arrive at: $L = (q + z)m - M$ (III)

If $(q + z)m$ is smaller than M then the potential L is a negative magnitude (a negative magnitude for the material foundation [potential] of expanded reproduction of the means of consumption (L) is characterized by overproduction of means of consumption as a result of an unbalanced process of expanded reproduction).

Consequently, in an analysis of unbalanced expanded reproduction the magnitudes of M and L which characterize the material foundation of further expanded reproduction as it comes into being in the given cycle of production as a result of very definite proportions existing in the social product are of special significance.

Under conditions of balanced expanded reproduction, not only does $M = qm = \Delta c$, but also $L = zm = \Delta v$. Under unbalanced expanded reproduction these equations are violated. Therefore, in economic analysis of the conditions of lack of balance in expanded reproduction, it is necessary to differentiate the potential M from qm and Δc, and the potential L from zm and Δv. Without strict adherence to these differences a scientific analysis of the real process of expanded reproduction is impossible.

The magnitudes of the potentials for expanded reproduction, the means of production (M) and the means of consumption (L) necessary for economic analysis of expanded reproduction may be determined on the basis of one of the several special tables for balance in the national economy, balances in expenditures, and in output of production. model of such a balance is in table presented below.

Quadrant 1 presents the production relationships between departments in terms of objective labor, quadran the distribution of the final product (consumption, accu lation, export), quadrant 3, the national income, and qu rant 4 certain elements of redistribution of income.

The Soviet Union witnessed the first plotting of balan of productive expenditures and output. The developmen balance studies in the USSR was dictated by the require ments of life in a planned economy. Balances of grain products and fuels expressed in kind were the first to b compiled. At the end of the thirties, balances in kind w compiled for more than three hundred types of products 1924, on the decision of the Soviet government, the Cen Statistical Bureau proceeded to compile balances for th national economy for the 1923-24 fiscal year. In 1925, a re by the Central Statistical Administration of the USSR on the first result of erection of balances for the tional economy was published. In 1926, a large monogr The National Economic Balance of the USSR for 1923-2 was published.

This monograph published balances in kind for twent eight types of agricultural products, for two products o the lumber industry, and for eight types of manufacture mass market consumer goods. However, three large ta for balances in the national economy (capital, balance production and distribution of the social product, nation income) were the most important items.

The balance of production and distribution of the soci

<table>
<tr><td rowspan="3">Structure of Expenditures</td><td colspan="13">Output of Products and Distribution Thereof</td></tr>
<tr><td rowspan="2">Line and Number</td><td colspan="5">Departments</td><td colspan="5">Final Social Product</td><td rowspan="2">Total Output of Products</td><td rowspan="2">Physical Destruction of Property</td></tr>
<tr><td>1</td><td>2</td><td>...</td><td>n</td><td>Total</td><td>Popular Consumption</td><td>Capital Investment</td><td>Reserves</td><td>Export</td><td>Material Expenditures in the Productive Sphere</td></tr>
<tr><td>Column Number</td><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr>
<tr><td>Department</td><td></td><td colspan="5" rowspan="8">Quadrant 1</td><td colspan="5" rowspan="8">Quadrant 2</td><td></td><td></td></tr>
<tr><td>1.</td><td>1</td><td rowspan="7"></td><td rowspan="7"></td></tr>
<tr><td>2.</td><td>2</td></tr>
<tr><td>…</td><td>3</td></tr>
<tr><td>n.</td><td>4</td></tr>
<tr><td>Import</td><td>5</td></tr>
<tr><td>Material Expenditures upon Objects of Labor</td><td>6</td></tr>
<tr><td>Amortization</td><td>6a</td></tr>
<tr><td>National Income</td><td></td><td colspan="5" rowspan="5">Quadrant 3</td><td colspan="5" rowspan="5">Quadrant 4</td><td rowspan="5"></td><td rowspan="5"></td></tr>
<tr><td>Payment for Labor</td><td>7</td></tr>
<tr><td>Surplus Product Realized in</td><td></td></tr>
<tr><td>a. The Productive Sphere</td><td>8</td></tr>
<tr><td>b. Total Social Expenditures</td><td>9</td></tr>
<tr><td>Total Social Expenditures</td><td>10</td><td colspan="5"></td><td colspan="5"></td><td></td><td></td></tr>
</table>

oduct was given in such form as to identify four branches agriculture, and thirty-seven individual products, three anches in the mining industry, and eleven in the manufac- ring industry. Individual fields of construction and the blishing industry were also given separate treatment. arious branches and types of production were grouped into ır general categories (products for personal consumption, w material, and materials in general, fuels, tools of oduction).

Tables of balance in the national economy include as well balance of the expenditures and output of production, iich is reproduced here (see table below).

This balance (with certain condensations) reproduces the mmary data for the table of the balance and distribution the social product, and the table of national income. We ve only combined these two tables to yield a new column, e difference between material expenditures (without nortization), and productive consumption. The data in ese columns are given in parenthesis, as they will not be und directly in the balance published by the Central atistical Administration of the USSR.

Productive consumption was divided into consumption of w materials and materials, fuel and tools of production the first Soviet balance. Consequently, the first full Soviet lance table contains, in essence, four different staggered lances for three branches of the national economy (agri- lture, industry, construction). The totals of these stag- red balances make it possible to obtain not only a stag- red balance for productive consumption (given in the ble published by the Central Statistical Administration of e USSR), but a staggered balance for material costs in toto r the three indicated branches of the economy; and par- ally also for transportation and trade as well.

If the line representing tools of production be subtracted om productive consumption, one obtains material ex- nditures of the objects of labor (intermediate products). e numerical data under this heading coincide with the aterial costs" in the Table for "National Income" (with a very slight disagreement on balance). However, elimination of tools of production from productive consumption would require the introduction of a new column "Capital Investment" which did not appear in the first table for the Balance of the National Economy of the USSR. In this connection, we have employed in Table 2 the results of the staggered balance, including tools of production.

Out of the entire system of tables of balance of the national economy of the USSR, the balance of expenditures and output of production is the only one to have attained some currency abroad, and even this in the form of the input-output tables of production, which in essence is only the first quadrant of this balance table.

In 1941, the American economist W. Leontief (8) in his work The Structure of American Economics provided a checkerboard balance for forty-one branches of the American national economy. It is characteristic that the first of W. Leontief's tables does not even contain a column for "Capital Investment."(9) This table is based on the Soviet example of construction of a balance. W. Leontief merely combined the balance of production and distribution of the social product with a table of national income, increased the number of branches of the national economy in the checkerboard balance of objects of labor (intermediate product) from three to forty-one, coordinating the plotting of balances with equations providing relationships between expenditures and output of production (which had been indicated by the Russian economist Dmitriev as far back as 1910).

Currently, studies in the compilation of output and expenditure balances have come into wide use in the West as well. However, Western economists give their major attention to the first quadrant. Therefore, in the West tables of this kind have come to be called input-output tables. One such table (England, 1950) we shall use below to analyze expanded reproduction under conditions of an unbalanced national economy.(10) This required recalculation of the input-output tables as a balance table for expanded reproduc-

FIRST ATTEMPT AT A BALANCE OF COSTS AND OUTPUT OF PRODUCTION IN THE USSR 1923/24
in Millions of Chervonny Rubles

	Productive Consumption					Total Productive Consumption	Consumption		Export	Reserves at the end of the year	Total distributed
	Agriculture	Industry	Construction	Transportation	Commerce		by the population	by institutions			
. Agriculture	3173.5	2548.4	145.4	50.1	1.0	5818.4	4333.4	62.4	337.3	86.6	10738.1
. Industry	467.5	2384.8	316.6	397.5	146.2	3672.6	5499.3	324.3	192.2	1336.7	11025.0
. Construction	201.6	95.5	—	—	15.0	312.1	541.2	69.7	—	—	853.3
. Publishing	—	—	—	—	—	—	17.7	19.5	0.4	63.6	101.2
5. Total	3842.6	4988.7	462.0	447.6	162.2	9903.1	10321.9	475.8	529.9	1486.9	22717.6
. Difference between productive consumption and material expenditures	(-785.9)	(-194.5)	—	(-88.0)	(-16.3)	(-1104.3)					
. Wear of basic capital	212.8	219.9	—	70.6	—	503.3					
. National income	5652.1	2612.3	391.3	909.5	2400.7	11965.9					
. Gross Production	8921.6	7626.4	853.3	1339.7	2545.9	21286.0					
. Transportation	245.7	403.6	—								
. Commerce	1353.0	1306.4	—								
. Import	86.7	343.2	—								
. Reserves	118.7	1141.9	—								
. Excise Taxes	12.4	203.5	—								
Total	10738.1	11025.0	853.3								

tion. It is only this that makes it possible to break down the social product in terms of material goods (tools and objects of labor, objects of consumption), and by value (replacement of means of production, payment of labor, surplus product). Otherwise it would be impossible to determine the potential for expanded reproduction of means of production (M) and for means of consumption (L).

In order to derive data on production in the department "Production of means of production" (in the Marxist category), it is necessary to combine certain elements in the balance of expenditures and output of production, as production of objects of labor, capital investments, and reserve supplies. Or, in other words, divisions falling into different quadrants of this balance. In order to obtain data for Department II, it is necessary to group such categories of the balance as the personal consumption of the population, and consumption of material values by offices and organization.

In order to distinguish in the production of each of these major departments of material substance the fundamental elements of value, it is necessary to classify both the expenditures on objects of labor, the capital expenditures, and the formation of reserve supplies, and the personal consumption of the population, the consumption of institutions, and export into the following basic value components:

1. replacement of material expenditures (c);
2. payment for workers in the sphere of material production (v);
3. surplus product (m).

In view of the fact that the English table for 1950 does not make it possible correctly to identify surplus product, we have confined ourselves in this instance to an identification of national income as the sum of payment for labor and surplus product.

The presence of an interior quadrant, plotted in the form of a checkerboard table, and characterizing the interflow of means of production among branches of the national economy, makes it possible to reconstruct the balance of expenditures and output of production to within some approximation within the diagram of expanded reproduction.

To do this, it is necessary in the columns of the interior quadrant (checkerboard spaces), to calculate factors for direct expenditures (by dividing each index in the given column by its total). The direct expenditures coefficients thus obtained are successively multiplied column by column, in each case by each absolute index, in one of the columns of the upper right-hand quadrant (the final purchaser). The resultant figures (results of multiplication of one and th same absolute index for final output by coefficients for direct expenditures in the corresponding column), are entered in the columns of a subsidiary table. The totals this column will equal the corresponding absolute index.

Thus, the indices at the intersections of the lines and columns are transferred to the total line for the given column in the auxiliary table. The number of auxiliary tables is equal to the number of columns in the right up quadrant of the table. Subsequently, a final table is compiled from the total columns of the auxiliary table. The sums of the columns of this auxiliary table yield the tra formed absolute indices for the upper right-hand quadra of the balance table. In similar fashion, the columns in left upper quadrant (checkerboard boxes) are elaborated to obtain the transformed total numbers on the circulati of intermediate product (objects of labor). The result o this recalculation of the balance table for expenditures output of production is to transform it into a table for ba ance of expanded reproduction, in which the structure o expenditures is not presented by branches of production (as in the first table for expenditures and output of prod tion), but is classified by objects of labor, objects of co sumption, and by investment, i.e. separately for the sph of production of the means of consumption, and the sphe of production of the means of production.

On this page we present the results of a recalculation the British balance table for 1950 into a balance table fo expanded reproduction.

From this table it is possible to determine the necess magnitudes for the potential of M and L:

$M = v_1 + m_1 - c_2 = 4{,}673 — 2{,}196 = 2{,}477$

$L = (q + z)m - M = 700 + 1{,}433 — 2{,}477 = —334$

$(q + z)m = 2{,}143$

Thus for England in 1950, a certain disproportion in t national economy was characteristic (in the direction of overproduction). The measure of this disproportionality

$B = [q + z)/m]/M = 2{,}143/2{,}477 = 0.865.$

An analogous calculation was made for England for 1 (in accordance with the table of T. Barn, published in th Journal of the Royal Statistical Society for 1952, Ser. A vol. 115, Part 1). The following result was obtained:

$(q + z)m = 691, \; M = 557, \; B = 691/557 = 1.24.$

This balanced coefficient characterizes 1935 as a year a degree of economic uplift in England. The potential o expanded reproduction of objects of consumption (L) for

A Balance of Expanded Reproduction

Social expenditures	Sphere of production of means of production				Sphere of production of means of consumption			External sphere (export)	Tot
	Production of objects of labor (replaced)	Accumulation		Total	Consumed by				
		Reserves	Capital investment		The population	Institutions	Total		
Material expenditures	1,811	372	499	2,682	3,553	317	3,870	1,125	7,6
Excluding imports	1,354	144	519	2,017	1,940	256	$\boxed{2{,}196}$ $= c_2$	655	4,8
Newly created value (v + m)	3,401	328	944	$\boxed{4{,}673}$ $=v_1+$ $+m_1$	5,200	1,740	6,940	1,615	13,2
Total	5,212	$\boxed{700}$	$\boxed{1{,}443}$ = (q + z) m	7,355	8,753	2,057	10,810	2,740	20,9

950 is a negative value, and for 1935 it is positive.

The recalculation we have made of the British balance ble into a table of expanded reproduction was done in acordance with coefficients for expenditure, i.e., in terms f the value elements of production (c, v, m).

In recent years, a recalculation of this same English ble of 1950 has been published as a table of distribution f final demand (consumption by the population, consumption y the government, capital investment and export) into the ollowing elements: pure production; imports; indirect xes (excluding subsidies).(12) This recalculation was ade in proportion to the coefficients of output of producon by calculation per unit of final production, and not roportional to the coefficients of the direct expenditures. his calculation does not identify the elements of costs , v, m), and therefore a transformed table of this kind oes not make it possible to determine the potentials of I and L, and consequently does not permit determination f deviations from the proportions of a balanced expanded eproduction existing in the real economic situation.

Within the limits of the present article, it is impossible o present even a brief critical analysis of the experience f plotting of balances by the West European and American conomists. Recently, an extensive literature has appeared broad in terms of input-output productive tables of national conomic budgets, economic models of the balance type, tc. The necessity has matured for an exhaustive critical Iarxist examination of these structures in our press.

It should be emphasized that only recalculation of a alance of expenditures and output of production into a balnce table for expanded reproduction will make it possible o obtain the data required to analyze processes of reprouction in terms of Marxist methodology. Such balance ables are of enormous importance for the planned direcion of the national economy, for the revelation and prevention of disproportions in the course of development of socialist reproduction.

FOOTNOTES

1. Karl Marx, Frederick Engels, Selected Letters, 1953, pp. 140-145 (Russian).
2. The Lenin Collection, Vol. 11, p. 349 (Russian).
3. V. I. Lenin, Collected Works, Vol. 1, p. 65 (Russian).
4. Rosa Luxemburg, The Accumulation of Capital, 2nd ed., Government Press, 1923, p. 345.
5. See V. I. Lenin, Collected Works, Vol. 1, pp. 69-71.
6. Rosa Luxemburg, The Accumulation of Capital, p. 112.
7. Within the limits of physical destruction of property (total of column 12), expenditures for amortization are classified with surplus product.
8. W. Leontief was born in Russia and graduated from Leningrad University in the twenties. His article on the First Soviet Balance of the National Economy was published in the magazine Planned Economy, No. 12, 1925. Comparing this balance with West European investigations and American censuses, W. Leontief emphasized that only the Soviet balance provided a general picture of the entire process of reproduction in the form of a general table for the economy of sorts.
9. W. Leontief, The Structure of American Economics, 1919-1929, Cambridge, 1941.
10. National Income and Expenditure, 1946-1952, London, 1953, pp. 24-25 (15 tables).
11. In more detailed tables, the material expenditures are subdivided by branches of the economy and imports are specified separately, while newly created values are subdivided into payment for labor and the cost of the surplus product.
12. See Review of the Economic Situation in Europe in 1957, Geneva, 1958.

ZHAMIN

(Continued From Page 10)

oviet Government, Comrade N. S. Khrushchev, on Sepember 7th 1958 to Dwight D. Eisenhower said: "An attack on he People's Republic of China is an attack on the Soviet nion. We have a treaty of friendship, alliance and mutual ssistance with the great friend, ally and neighbor. Bound duty, our country will do everything necessary together ith People's China to assure the security of both our tates, the interests of peace in the Far East and the inerests of peace in the entire world." Other countries of the ocialist camp also declared fraternal support of the CPR. he time when the ruling circles of the US were able to dicte their will by using force has passed irrevocably.

The fraternal collaboration of the Chinese People's Republic with the Soviet Union and other countries of the socialist camp guarantees further successes of the socialist camp in the struggle for peace and socialism. The powerful advance of all branches of the national economy, sciences, and culture of People's China strengthens the whole socialist camp and serves to consolidate world peace. The general line of the CP of China is a scientifically substantiated program for creating the socialist method of production in China through continuous revolutionary reorganization, further growth of the productive forces of the country, and perfection of socialist production relations.

A. Lavrischev:

The Laws of Geographic Distribution of USSR Socialist Producti

In their works the founders of Marxism disclosed the laws of the development of socialist society, revealed the causes of the unequal development of capitalist economy and of the warped location of production under capitalism. They also formulated the general laws and outlined the main features of socialism and communism and, in particular, the most important laws of the geographic distribution of production. Friedrich Engels wrote: "Only a society which is capable of establishing a harmonious combination of productive forces according to a single general plan can distribute industry throughout the country in a way which is the most suitable for its development and preservation as well as for the development of other elements of production." (Friedrich Engels, "Anti-Duhring" [in Russian], 1957, p. 280).

After the victory of the Great October Socialist Revolution the Communist Party of the Soviet Union, on the basis of the general theoretical statements of Marxism-Leninism concerning the objective laws of the development and geographic distribution of socialist production, creatively developed these statements and demonstrated how to utilize skillfully the discovered economic laws of socialism in the interests of construction of the new society. At all stages of the socialist construction of the USSR, great attention has been paid to the correct territorial distribution of production.

As early as in April, 1918, V. I. Lenin, defining the tasks of the Academy of Sciences in his "Sketch of the Plan of Scientific-Technical Tasks" advanced the following thesis of correct territorial distribution of industry — the most important branch of socialist production: "Rational distribution of industry in Russia from the point of view of the nearness of the raw materials and minimal losses of labor on the way from the processing of the raw materials to the consecutive stages of processing semimanufactured goods, including the manufacture of the final products.

"Rational (from the point of view of large-scale industry and especially of the trusts) mergers and concentration of production in the few largest concerns.

"The ability of the present Russian Soviet Republic to the greatest possible degree to supply itself with all the most important raw materials and industries." (V. I. Lenin, "Works," Volume 27, p. 288).

These directives of Lenin served as the most important guideposts for the Communist Party of the Soviet Union in its work of the rational distribution of the socialist production in the USSR. Questions concerning the proper geographic distribution of socialist production were discussed at almost all congresses and conferences of the Communist Party of the Soviet Union and at the plenary sessions of the CC, CPSU, and found reflection in the long range and current plans for the development of the USSR's economy.

An enormous amount work work was accomplished under the Soviets in the improvement of the geographic distribution of production. Great industrial centers were created in Kazakhstan, Middle Asia, North, Western and Eastern Siberia during the Five-Year Plans on the basis of study and utilization of the natural resources of these regions. This made it possible to bring production to the sources of ra materials and fuel and to the consumption areas. The So Union carried out such grandiose works for the national economy as the Ural-Kuznetsk Combinate, and hydrotechnical construction on the Volga, Dnieper, Don, and other rivers. Great work was carried out in the field of study utilization of the natural resources of the USSR's various regions in accordance with the general aim of improving territorial distribution of the branches of agriculture. Substantial experience has been accumulated in working the division of the country into economic regions, proper specialization, complex development of the regions' econ mies and rationalization of the system of transport conne tions.

The geographic distribution of the USSR's socialist pro duction is determined by a number of mutually connected objective laws which reflect the requirements of the economic laws of socialism and, first of all, the requiremen of the basic economic law of socialism and of the law of planned proportional development of the socialist econom as well as of the law of value subordinated to them.

It is known that geographic distribution is an essential component of the development of social production, becau such production cannot be considered apart from its geographic distribution. Such factors as distribution of the n ural resources over the territory of the country, geograp differences in natural conditions, cultural accumulation o the past, historically formed production skills of the pop tion and various other factors are an important influence upon the distribution of production. The weight of the influence of these factors on the geographic distribution of productive forces depends upon the methods of productio It must be said that the objective laws of geographic dist bution of the productive forces show themselves not only on a country-wide scale but also in the regions and in th branches of the economy.

It must be observed that in some economists' works th laws of the geographic distribution of socialist productio are confused with the principles of geographic distributi Economic laws are objectively existing categories which under socialism, are disclosed and utilized by society. principles of geographic distribution are categories of th economic policy carried out on the basis of the study of economic laws in action.

***

One of the most important laws of geographic distribu of socialist production is its planned and, as far as poss even distribution on the territory of the country, which i expression of the law of planned, proportional economic velopment.

Already in "Anti-Duhring" when he examined question of the development of the socialist economy, Engels poi out the necessity for even geographic distribution of production and primarily of large-scale industry throughou country to a maximal degree.

During the existence of Soviet power considerable suc ses were achieved in the planned distribution of socialis production and in the development inside the economic r ions of a complex of heavy industries. Dispersion of inistrial production throughout the Soviet Union made it ossible to end the reliance of the Union in respect to imortant industrial products on particular regions only. The reation of large centers of heavy industry (Sverdlovsk, helyabinsk, Magnitogorsk, Nizhnii Tagil, Novosibirsk, talinsk, Karaganda, and others) on the basis of utilization f enormous natural resources ensured a comprehensive evelopment of the economy of those inidvidual regions.

The geographic distribution of agricultural production has een greatly improved through the opening of massive areas f virgin and fallow lands in the USSR eastern regions (in azakhstan, Siberia, Ural, etc.). The dispersion of Soviet ndustry, in particular of tractor and agricultural machine roduction, has ensured creation in all regions of the basis or the mechanization of agricultural production, and has ius created conditions for its powerful upsurge.

Planned geographic distribution of industry and agriculural production greatly helped to end the division of USSR egions into industrial and agricultural, into producing and onsuming regions. Now all USSR regions are industrially eveloped to some degree and at the same time produce a arge volume of agricultural products.

Comrade N. S. Khrushchev, at the jubilee session of the JSSR Supreme Soviet in 1957, pointed out the necessity in ne next fifteen years of bringing the production of steel in ne USSR to the level of between 100 and 120 million tons a ear, of petroleum between 350 to 400 million tons, of powr between 800 and 900 billion kwh, etc. In order to carry ut this grandiose program we must build in the nearest iture new centers of heavy industry in Western and Eastrn Siberia, in the Ural, Kazakhstan, Far East, Eastern olga, and other regions. New industrial centers will be reated in the Ural-Volga regions on the basis of the petroeum, gas and chemical industries; in Western and Eastern iberia on the basis of developing power production, ferrous nd non-ferrous metallurgy and especially electric metalirgy (production of aluminum, magnesium and other ietals), and the chemical as well as food and light industries; in the European North by developing the petroleum nd gas industry, timber and lumber processing industry nd the chemistry of forest products.

The territorial redistribution of production, expecially of eavy industry, helps the effective and comprehensive ilization of the economic resources and natural riches of e country as well as the economy of the regions, the peediest growth of the regions, formerly economically ackward, and creates conditions for the correct division of ocial labor among the economic regions and inside the egions.

The planned redistribution of socialist production is cared out first of all with an eye to bringing production closer the sources of raw materials and fuel and to the regions hich consume the finished products. Bringing production oser to the sources of raw materials and fuel and to the gions of consumption is of great importance for ending rational and long distance haulage; it would help to inease the effectiveness of socialist production and the owth of productivity of social labor. As early as in the st long range economic plan of the Soviets — Lenin's an of electrification approved at the 8th all-Russian Coness of the Soviets in December 1920 — it was stated: "It clear that rationalization of our industry will be accomnied by a considerable change in its geographic distribuon in the country as a whole in order to bring the manufacring industry closer to the main sources of raw materials d fuel or for general economic reasons." ("The Plan of ectrification of the RSFSR," 1955, p. 167).

Bringing production closer to the sources of raw materials and fuel would help to utilize more fully raw materials, fuel and power resources. Wide application of the best technique, rational organization and specialization of production, bringing plants, especially those which need much power and fuel, closer to raw materials and fuel would ensure a complex utilization of raw materials and the economic growth of the new regions rich in natural resources.

Much has been done in the USSR to bring production to the sources of raw materials and fuel. For example, large metallurgical concerns were built in the iron ore basins or in the areas of coking coal (the Kuzbass, the Ural, the Donbass, Krivoi Rog) as well as in the regions half way between sources of raw materials and fuel (metallurgical plants of the Low Dnieper). Copper smelters were built near the copper ores of the Ural and Kazakhstan. Placing of the copper smelters near copper ore deposits is necessitated by the fact that copper ores contain a small percentage of metal, rendering their haulage at great distances unjustified. Branches of heavy machine building, as a rule, were placed near metallurgical bases (the Novokramatorsk plant in the Donbass, the Ural plant of heavy machine building in Sverdlovsk, the South Ural machine building plant). The development of the branches of the chemical industry which will undergo the greatest growth during the next years (production of polymers) is carried out in the areas of raw materials and sources of cheap and abundant coal and hydroelectric energy. The most favorable conditions for the development of this branch of the chemical industry are available in the regions of Eastern Volga, Siberia and North Caucasus. The potassium industry plants — one of the most important branches of chemical production — were built near sources of raw materials. The huge Upper Kama potassium combinate was built at the Upper Kama deposits. Those branches of the food industry which utilize difficult-to-transport or perishable raw materials, as for example, sugar, canned foods, butter, or cheese, oil mills, starch-molasses using potatoes, primary viniculture, drying of vegetables, are all built in the regions of production.

Proper distribution of production also presupposes placing it closer to the areas of consumption of manufactured goods. Thus, in order to reduce irrational haulage of expenses of production, petroleum refining plants have been built in the regions of petroleum production, and also in the regions which consume petroleum products. Large concerns of the petroleum refining industry were built under the Soviets in the Center (Moscow, Gorky, Yaroslavl), in Western Siberia (Omsk) and in some other regions which are large consumers of such products. Manufactured goods in regions of consumption (considering the availability of raw materials) were produced for machine building plants, producing equipment for the mining industry, equipment for the light and food industries, tractors and plants of agricultural machine building. Almost the whole production of equipment for sugar mills is in the regions where the sugar industry is concentrated, while production of equipment for tea factories is concentrated in the Georgian regions of tea culture. The first choice for the location of such branches of the food industry as flour mills, bakeries, whole milk and similar products, all of which are expensive to transport or are perishable, are regions of consumption of such products.

The necessity of further improvement in the geographic distribution of productive forces for the purpose of bringing industry closer to the sources of raw materials, fuel, and power resources and to consumption regions is emphasized in the directives of the 20th Congress of the CPSU.

Organization of the proper territorial division of social labor among the union republics and economic regions as well as inside the boundaries of the economic regions, ensuring proper specialization and cooperation among the concerns to effect a considerable increase of labor productivity, is of extremely great importance for the most rapid development of the USSR economy.

Marx pointed out that "men cannot produce unless they join in a certain way for the mutual activity and for the mutual exchange of products of their activity" (Marx and Engels, Selected Works, Vol. I, 1955, p. 63). A more developed division of social labor is a basis for wide economic ties among the producers. Under capitalism, where the means of production are private property, social division of labor is characterized by exploitation and exchange takes place in the form suitable to capitalism. In socialist society, the economic base of which is the socialist system of economy and socialist property in means of production, exchange of the products of society's activity is carried out on the basis of friendly collaboration and socialist mutual help.

Because of the Soviet Union's vast territory, tremendous reserves of varied natural resources and the diversity of natural and economic conditions of its various regions, the organization of the rational territorial division of social labor is extremely important.

The territorial division of social labor among the economic regions of the Soviet Union — the result of historical development — determines their mutual interdependent economic development. Having different economic conditions and possessing different natural riches, the Union republics and economic regions develop their economies on the basis of close economic help to each other and broad economic ties. Thus, the Ukrainian SSR supplies many regions of the Soviet Union and, first of all, the Center and the North-west with coal, ferrous metals, chemicals, grain, sugar and other products. In their turn the regions of the North, North-west and Center satisfy Ukrainia's need in timber, textiles, paper and other products. The Uzbek USSR 'exports' to many USSR regions cotton, astrakhan, silk and other goods. At the same time Uzbekistan obtains from other regions timber, metals and metal manufactures, grain, and other goods. These broad economic ties reflect economic, national, natural, historical and other peculiarities of the regions. Therefore, knowledge of these local differences of the USSR regions plays a very important role in organizing the proper territorial division of social labor among the Union republics, their economic regions and inside the boundaries of these regions.

Questions of territorial division of social labor are closely connected with questions of administrative arrangement and division of the Soviet Union's territory into economic regions.

Under capitalism, administrative-territorial division has no scientific basis and does not correspond to actual economic division. In Tsarist Russia preservation of the old administrative-territorial division of the country and the spontaneous formation of its economic regions resulted in sharp differences between administrative divisions and economic regions.

In the Soviet Union administrative-territorial division is indissolubly connected with division of territory into economic regions. Administrative-territorial divisions constantly take into consideration changes in the economic development of various regions and this finds its expression in establishment of new and abolition of old administrative-territorial divisions as well as in changes of their boundaries.

The measures taken by the Party and the government for the improvement of the management organization and transfer of the center of gravity in that respect to the local administrations in the economic-administrative regions con
prise a new and very important stage in the development
the Soviet Union's productive forces. In conformity with
the law concerning further improvement in the organizati
of industrial and construction management, approved at th
7th session of the USSR Supreme Soviet (1957), 104 econo
ic-administrative regions were established in the Soviet
Union. Transfer of the center of gravity in operative man
ment to local administration created favorable conditions
for the improvement of specialization of the regions, for
interregional cooperation of plants, for rationalization of
production ties and liquidation of excessively long haulage
inside the economic-administrative regions and between
them.

In order to ensure highest productivity of labor, further
development of specialization and cooperation of producti
complex development of the economy and the solution of t
great problems posed by the practice of a planned sociali
economy, we have to plan the economy in large economic
regions.

For the purpose of economic planning the territory of t
USSR is divided into thirteen large economic units which
are vast territorial economic complexes, consisting of se
eral regions and republics. For these large units, the pla
ning organs work out measures of specialization and complex development of their economies from the point of vie
of solving the economic tasks facing the Soviet Union,
through productive cooperation and liquidation of irration
and excessively long haulage. On the basis of calculated
balances they establish proportions for each large econom
unit for the development of various branches of the econo
and determine the tasks in connection with location of new
concerns and production lines according to the laws of territorial distribution of socialist production.

Considerable successes have been achieved under the
Soviets in rationalizing territorial distribution of labor on
the basis of comprehensive utilization of natural and economic resources of the various regions. In each region,
special attention is paid to the development of branches o
the economy determining its all-Union specialization. Wh
specialization of the economy is determined correctly, th
natural conditions and economic peculiarities of each region are used to the best advantage.

At the same time these large economic units and Union
republics intensively develop branches of local character
which satisfy the needs of each economic region, republic
or administrative region as well as the needs of the concerns which are important for the national economy.

Concentration of economic activity of a large economic
unit on products of a particular kind which characterize
this unit results in production on a scale exceeding local
needs. This leads to the mass production of certain kinds
of industrial products and an increase in productivity of
social labor.

Questions of division into economic regions and their
specialization are closely connected with questions of the
comprehensive development of the economy of the USSR
Union republics and economic regions. The complex dev
opment of regions presupposes establishment of a correc
ratio between the development of industry and that of agr
culture, fullest utilization of local natural resources and
conditions, of production possibilities and skills of popula
tion. A complex development of the economy is possible
only under conditions of socialist society where a planne
proportional development of the economy is carried out.

The problem of complex development of the economy
a region, which was for the first time advanced and ratio
ally motivated in Lenin's plan of electrification, found fu

ther expression and development in Five-Year Plans and in the decisions of Party congresses and plenums of the CC, CPSU. Along with a continuous growth of the branches of the economy which are of national importance and which determine the specialization of republics and regions in the system of the USSR, a complex development of socialist economy requires creation and development of branches of industry which supplement the leading branches of production. A complex development of the economy presupposes organization in the Union Republics and economic regions of the production of local kinds of fuel, building materials, chemical fertilizers, and products of the light and food industries for mass consumption. Ensuring satisfaction of local needs in bulky products of mass consumption large industrial centers which obtain a large volume of such products from remote regions is of special importance.

A complex development of regions does not mean that they become economically isolated and self-sufficient. On the contrary, it strengthens their specialization in the national economy and develops close economic ties among the regions. A complex development is one of the most important conditions for the rational geographic distribution of socialist production, for the increase in productivity of social labor, for the growth of material welfare and for raising the cultural level of the working masses.

During the Five-Year Plans considerable successes were obtained in the establishment of production-territorial complexes in various regions of the Soviet Union. For example, in Transcaucasia, simultaneously with the development of branches which determine the all-union specialization of this region (production and processing of petroleum, mining of manganese ore, production of ferroalloys, tea culture, citrus cultures and other subtropical products, raising of cotton), we have established such branches of industry as coal mining, chemical, power, machine building, construction materials, etc. Similar processes have taken place in all regions of the Soviet Union. An important factor in a number of the territorial-production complexes are hydrotechnical structures. Thus, a complex development of the Volga and adjacent regions is connected to a great degree with a complex of measures which depend upon harnessing the Volga's water power. The start of operation of the Volga and Gorky power stations and the completion of the Stalingrad and other projects will conclude the work begun before the war, creating a great power base, developing water transport, irrigation, water supply and fisheries. Further growth of machine building, of chemical, petroleum, food and light industries, the development of river transportation, electrification of railroad transport, and use of power in agriculture will be ensured on the basis of cheap water power.

In the region of the Lenin Power Station on the Volga we built a large plant for the production of construction machinery, a large cement plant, a lumber processing plant, a ship repair yard and a grain elevator, and a synthetic rubber plant and others are under construction.

The Mingechaur complex on the Kura plays an exceptionally important role in the development of the Transcaucasian economy. Its completion solves the problem of power supply for Azerbaidzhan industry, ensures a deep water route along the Kura, rational utilization of Kura's waters for the development of agriculture as well as the regulation of the flow of water. (Flooding of the Kura-Arax plain and waterlogging of the soil will be impossible). Irrigation and bringing water closer to agricultural lands of the Kura-Arax plain will make it possible to expand the areas under cotton, subtropical and other cultures.

In its practical work of geographic distribution of socialist production in accordance with the requirements of the objective economic laws of socialism, the Soviet state ensures a high rate of economic development of eastern regions and regions of small nationalities which are not well developed economically in order to bring them to the level of the highly developed regions.

In his work "Next tasks of the Soviet power," written in 1918, V. I. Lenin, speaking of the enormous natural riches of the Soviet republic, mentioned the great natural resources of its eastern regions: ores (the Ural), coal (Western Siberia), timber, water power, raw materials for the chemical industry, etc. We know that in the USSR eastern regions there are about 75% of all known coal reserves of the Soviet Union, about 80% of its water power, 80% of its timber, enormous reserves of non-ferrous metal ores and rare earth metals, iron ores, chemical and non-metallic minerals.

Rapid development of the economy of the eastern regions began only under the Soviets. During the First Five-Year Plan the foundations of the Ural-Kuznetsk combinate were laid. Construction of the metallurgical combinates of the Ural and Western Siberia helped the whole economy of the eastern regions. The development of the coal and metallurgical industries required construction of railroads, power stations, chemical and machine building plants, and establishment of large plants of the light and food industries. In order to prevent an accidental breakdown in the supply of some industrial goods produced by a sole plant for all of the Soviet Union, duplicate plants were built in a number of branches of the machine building, petroleum processing and chemical industry.

Powerful heavy industry built in the East in the prewar period during the last war became one of the most important bases of the Soviet armament industry. During the postwar years the industry of eastern regions, greatly developed during the war, made a significant contribution to the rapid restoration of the economy of regions laid waste by the German-fascist invaders.

In recent years eastern regions also became an important base of production of marketable grain and livestock.

The solution of the USSR's basic economic problem requires a further, even more rapid growth of the productive forces of eastern regions. The decisions of the 20th Congress of the CPSU envisage in the next ten to fifteen years the establishment in eastern regions of a third metallurgical base.

The reports made at the Eastern Siberian Conference (which took place in August, 1958) confirmed the presence in Eastern Siberia of enormous unique resources which, in combination with natural resources of other Siberian regions, constitute a firm foundation for further development of the Soviet material-technical base. The Angara-Pitsky iron ore basin in the Krasnoyarsk region, the Angara-Ilimsk region, the southern Aldan basin in the Yakutsk SSR, iron ores of Khakasiya, Mountainous Shoriya and Kazakhstan all make it possible to develop in the near future in the east a large metallurgical base with annual production of pig iron of up to 20 million tons.

The role of eastern regions and especially of Eastern Siberia in the further increase of fuel and power production is very great. The reserves of the surveyed Kansk-Achinsk brown coal basin exceed 1,200 billion tons. The reserves of coal on the Lena and Tungus coal basins are also great. General geological reserves of the Tungus Coal Basin alone are estimated at 1,745 billion tons. Recently a geological survey uncovered a huge basin of southern Yakutiya which has large reserves of coking coal. In the total coal production of the Soviet Union the share of the Irkutsk (Cheremkhov) and Minusinsk coal basins is growing.

Soviet geologists have also corrected estimates of coal reserves of Western Siberia. Geological reserves of the Kuznetsk basin are now estimated at 905 billion tons of which 157 billion tons lie less than 300 meters below the surface. The existence in eastern regions of enormous fuel resources makes it possible to create there a powerful coal mining industry.

Eastern Siberia has more than 40% of the USSR's water power. Conditions here for establishment of industries requiring large amounts of power and coal are extremely favorable. In Siberia the availability of cheap coal and water power, and construction of the main pipe lines for bringing petroleum from Bashkiria ensure the development of a powerful chemical industry and especially production of synthetic chemical products.

Kazakhstan has great reserves of polymetallic ores, iron ore, copper and manganese ores, bauxites and coking coal. On this basis, the development of ferrous and nonferrous metallurgy will continue. Utilization of very rich reserves of natural gas and petroleum in the Uzbek SSR, Turkmenia SSR and Kazakh SSR will spur the development of the whole complex of chemical industries.

In the near future a new powerful center of machine building will be built in eastern regions of the USSR, producing machines and equipment of all kinds as well as apparatuses and gauges.

Further growth of the productive forces in eastern Siberia will mean a more even distribution of industry and agriculture throughout the Union. The complex development of the economy of eastern regions with a clear-cut specialization would ensure a further improvement in the territorial division of labor and an improvement of the economic ties between the economic regions of the Soviet Union.

The Communist Party and the Soviet government pay great attention to the growth of the economy and culture of small nationalities of the Union.

The beginning of the Great October Socialist Revolution found the peoples of Russia at very different levels of economic and cultural development. It is enough to say that 25 millions in the outlying regions of Russia lived under conditions of precapitalist society.

The Great October Socialist Revolution put an end to national oppression, and established complete equality of Soviet nationalities in the political field. Through the socialist mutual help of all nationalities and especially of the brotherly help of the great Russian people, the peoples of our motherland, formerly backward, have since the establishment of the Soviet power, achieved great successes in the development of their economy and culture. As a result of a consistent national policy, the problem of ending economic and cultural inequality of peoples has been solved. Powerful socialist industry created in the national regions made it possible to carry out collectivization of agriculture and obtain a comprehensive development of their economy. The rate of economic development in the national republics was made very high to ensure speediest liquidation of economic and cultural backwardness. For example, while between 1913 and 1956 the gross industrial product for the Soviet Union as a whole increased 30 times, it increased in the Kazakh SSR 36 times, in the Kirgiz SSR 42 times, in the Armenian SSR 45 times, and so on. The industrial development of national republics was of great political importance because it ensured the creation of a core of workers, engineers and technicians. We built, during the years of socialist construction, metallurgical, petroleum and chemical industries, large power stations in the national republics, developed machine building plants, plants producing agricultural machines and tractors, cement works, large textile and food industries and many other industrial concerns.

Further development of the economy of national repub and development of specialization and cooperation among concerns (considering their economic, historical, geogra and other characteristics) is of great importance. It answers the requirements of more rational distribution of socialist production.

Measures carried out recently in expanding the jurisd tion and rights of the Union republics in the field of economic construction play a great role in further developi the socialist economy of the national republics and in strengthening the friendship of the peoples of our mothe land. Establishment of economic councils in the Union r publics and transferring into their jurisdiction industria and construction concerns which were formerly under Union jurisdiction are of great importance.

Expansion of the jurisdiction and rights of the Union r publics is a powerful stimulus for a more rapid growth their economy and culture. The resolution of the 20th Congress of the CPSU states that "in its national policy Party relied on Lenin's thesis that socialism not only do not remove national differences and peculiarities, but, o the contrary, ensures a comprehensive development and flourishing of the economy and culture of all nationalitie and peoples."

In carrying out measures for improving the geographi distribution of the USSR socialist production, the Party the Government also consider the necessity of ensuring international socialist collaboration and a rational divisi of social labor among the countries of the socialist cam

The socialist mode of production, which determines th unity of purpose of the countries in the socialist camp, bro to life a new, historically unknown relationship among peoples. Interrelations of the socialist countries, expre principles of proletarian internationalism, are based on equality and mutual help between peoples free from expl tion and who are following the road of construction of socialist and communist society, the road of constant grow of socialist production and raising the working people's standard of living.

Close economic collaboration of the Soviet Union with other socialist countries results in improving internatio division of labor in the camp of socialism. Each countr the socialist camp, while planning the development and g graphic distribution of its own production, considers the availability of production capacities and natural resourc of other countries in the socialist camp. Rational specia tion and cooperation of production among socialist count ensures savings of material and labor resources, incre the productivity of labor, and in this way expedites the e nomic development of the socialist camp as a whole as as of its individual members. International division of l inside the socialist camp is an important factor for the proper distribution of economic branches in the socialis camp.

There cannot be proper geographic distribution of pr duction under conditions of capitalism and domination o private property in the means of production, under cond tions of competition and anarchy of capitalist productio and unequal economic and political development of diffe countries. Under contemporary capitalism, the geograp distribution of production, being subordinated only to th interests of capitalist monopolies and their pursuit of m mal profits, is characterized by extreme irrationality.

A striking instance of the irrational geographic distri tion of production under capitalism is capitalist interna division of labor based not on equality of countries and ples and respect for their mutual interests, but extracti of high monopolistic profits. The unbalanced character of he international division of labor under capitalism is especially clear in the sharp division of capitalist countries nto industrial and agrarian countries, into highly developed nd economically backward countries. The main capitalist countries artificially delay the development of industry in colonial and dependent countries for the sake of obtaining monopolistic profits.

The perpetuation of the position of colonial and dependent countries as appendices to the imperialist countries, supplying them with agricultural and raw materials, deepens he contradictions between industrial and agrarian countries, between metropolises and colonies, brings about an extremely one-sided, narrow specialization of the economy of dependent countries and results in the separation of industry rom the sources of raw materials and fuel, of industrial nd agricultural production from regions of consumption, he final result being an enormous waste of social wealth nd a lowering of the productivity of social labor.

***

The role of science and technique in the uninterrupted growth of socialist production and its rational distribution is extremely great. One of the main trends of technical progress is electrification of production. Construction of large thermal and hydroelectric stations and transmission lines, and the wide use of power in all branches of the economy are of great importance to ensure planned territorial distribution of the productive forces and open great possibilities for the rapid development of the economic regions of the USSR.

In order to obtain the highest possible rate of power development, at present we must expedite the development of thermal power and delay the construction of some hydroelectric stations. While construction of thermal power stations should not take the place of construction of hydroelectric stations, the construction of thermal stations will make it possible to shorten the time between the start of construction and the first power generated and, for the same expenditures, will produce more power, thus gaining time in the economic competition with capitalism.

Atomic energy will play a great part in the improvement of the geographic distribution of production. The use of atomic energy for power production in the Soviet Union is characterized by construction of atomic power stations of great capacity first of all in the regions with limited fuel resources. Small expenditure of nuclear fuel for atomic power stations and, consequently, small expenditures on its transportation make it possible to build such stations in any region of the Union. Under conditions of Soviet economy this last fact allows rational distribution of power production over the territory of the Union, the main consideration being the power needs of the regions.

During the Five-Year Plans great successes were achieved in the application of chemical processes and introduction of new synthetic products in industry. Organization of the new plants utilizing artificial and synthetic raw materials considerably expanded the raw material base of important branches of industry.

The use of the latest achievements of science and technology in geological survey work greatly helped further utilization of the varied natural resources of the Soviet Union. The growth of reserves of ores and fuel in various regions of the Soviet Union is of great importance for a more rational distribution of socialist industry over the USSR territory.

The Soviet Union widely applies a complex utilization of raw materials. This ensures comprehensive use of natural resources and of various wastes of production so that each economic region now has new possibilities to increase production of various industrial goods.

The construction of industrial combinates in different regions on the basis of complex utilization of raw materials ensures a comprehensive development of the regional economies and reduction of expenditures of social labor per unit of goods. Under conditions of socialist planned economy large industrial combinates, where various branches of production are combined (metallurgy, chemistry, production of building materials, etc.) and the same kind of raw material is used in a number of processes, make up a single production complex.

Improvement in the territorial distribution of socialist production, rationalization of interregional and intraregional economic ties helps the work of technical reconstruction and introduction of new kinds of transportation: electrification of railroads, replacement of steam locomotives with diesel and electric locomotives, laying of a wide net of petroleum and gas pipelines, and the development of truck and air transportation.

In the practical work of the geographic distribution of the USSR's industry the Communist Party and the Soviet Government pay great attention to the questions of rentability of socialist production. Their purpose in this case is to ensure the interests of the economy not for a short period, but for decades.

The development of the USSR socialist economy from the point of view of national rentability is certainly not in contradiction with the principle of rentability of individual concerns and branches of production, rentability of which plays an important part in the growth of the socialist production forces and must be taken into consideration in the planning of new industrial construction.

In the actual socialist planning, distribution of industrial concerns among the USSR's economic regions is based on estimates of growth of production and consumption, ratio of the primary industry to the manufacturing industry, and the ratio of agriculture to industry in the region. In selecting a region where a concern is to be established we must consider the presence and location of existing concerns of this branch of industry, specialization of the economic regions, cooperation of concerns, availability of labor force, approximately determine which regions will consume the goods produced by the planned concern. Here we also must consider combining production for the most rational utilization of natural resources of economic regions, and for the complex utilization of raw materials in order to produce goods with a minimal expenditure of labor.

In accordance with the laws of geographic distribution of socialist production we determine the economic regions where a certain concern will be built, carry out necessary surveying and technologic-economic calculations in order to determine its precise location, and determine power, raw materials and water resources in the region of construction and the availability of labor power. Technical-economic calculations reveal the approximate capacity of the concern to be built and its production program with the basic list of products to be produced, estimate needs in raw materials, fuel and power, approximate cost and the sequence of construction. Technical-economic calculations and supporting evidence help distribute concerns correctly, bring them closer to the sources of raw materials, fuel and regions of consumption, result in the lowest expenditures on construction and, consequently, in a very large degree determine the rentability of industrial concerns.

***

Under the guidance of the Communist Party and the Soviet Government, the Soviet Union has achieved a great deal in improving the geographic distribution of socialist production during the Five-Year Plans. The planned, proportional development of socialist economy in accordance with the basic law of socialism resulted in better proportions of the branches on a country-wide scale as well as for the union republics and economic regions and thus helped achieve a more effective utilization of the natural conditions and economic resources of the USSR. The policy of socialist industrialization and collectivization of agriculture which was carried out resulted in tremendous successes in the development of the economy and culture of all republics and regions and especially of regions which were backward in the past.

Measures taken in the USSR for the rational distribution of socialist production were of great importance for strengthening the economic power, defense capabilities and independence of the Soviet state.

Self-denying labor of Soviet workers, their activity and initiative, the socialist methods of organization of labor a production, introduction on a large scale of the best achievements of Soviet science and technology in all branches of economy ensured a rapid growth of labor productivity and this resulted in raising the welfare of the working people.

Great successes achieved by the Soviet people under th guidance of the Communist Party in the development of th entire economy and in the better geographic distribution socialist production are a striking example of the unity o revolutionary theory and practice, and are examples of successful use by socialist society of the economic laws socialism, of the great advantages of the socialist econon system.

***

V. Spiridonova:

Iow to Stimulate the Utilization of Industrial 3asic Production Funds Through the Cost Accounting System

The new system of industrial management has created reat possibilities for the better use of production funds. nding of interdepartmental barriers makes it possible for ie economic councils to develop the work of uniting similar oncerns, of deepening their specialization, developing their ooperation and combining production. In this way a more ational distribution of equipment has been achieved and asic funds which remained idle for a long time have been tilized; consequently, production has been increased withut additional capital investments. Further successes in the ctivity of economic councils are, to a great degree, dependnt upon the improvement of planning and the strengthening f the cost accounting system.

The purpose of the cost accounting system in industry is ie creation of firm material stimuli for the concerns in ccelerating technical progress and the better utilization of ie means of production which are at their disposal. In articular, the more narrow the limits of utilization of obolete machines and equipment (as determined by technical rogress), the closer the connection between cost accountig and reproduction of the basic production funds.

The socialist system of planned economy can make much etter use of production capacities than is done in capitalt countries. Each year the effectiveness of the utilization basic production funds increases. For example, during 950-1956 these funds in the national economy increased by 3%, while the national income increased by 92%.

At the same time we still have great possibilities of betr utilization of production capacities, in particular through itting down idle time.

At some concerns — because of the violation of objective onomic laws and defects in the organization of cost counting — the interests of the workers and of the collecves are not always fully integrated with the interests of e entire society.

Economic processes develop more rapidly than improveents in the forms of management. In view of this the rms of management should be periodically examined so at they will not hinder the development of the productive rces. In existing practice the contradiction in the use of st accounting consists in the fact that the system of cost counting does not result in full responsibility of colleces and managerial personnel and does not stimulate them introduce technical improvements and to make the most ective use of the basic and circulating means entrusted the concern.

Among measures which strengthen economic stimuli for tter utilization of basic productive funds, the foremost is e improvement of existing procedure for the replacement worn out basic funds, making the system of depreciation arges conform with the tasks of technical progress and e degree of intensive use of equipment.

Socialist society is interested in a systematic lowering depreciation charges in per unit cost. Some economists irm that an increase of the share of depreciation charges in the unit cost is "quite a normal phenomenon." But such an assertion is due only to a misunderstanding of technical progress and to limiting it to an increase of productive capacity per worker. Actually, technical progress means at the same time an increase in labor productivity expressed in increased volume of production and reduced cost per unit and, consequently, in reduction of depreciation charges and overhead expenditures in unit cost.

Another purpose of depreciation charges is to ensure the fullest possible restoration of the value of the consumed means of production, — i.e. their replacement. In this connection, a correct evaluation of the funds, a correct method of determining the rate of such charges and rational forms of relating them to the principles of cost accounting are of great importance.

At present the interrelationship of the system of depreciation charges to the principles of cost accounting is found in the "Regulations Concerning Accounting Reports and Balances" applied since 1952. According to these Regulations, setting aside of depreciation charges continues during idleness and capital repairs. In this way the losses from excessive idleness are covered with profits from those concerns responsible for the idleness of the basic funds or the undue prolongation of the period of repair. Such a connection of the effective utilization of basic funds with the financial results of a concern's operation create an economic stimulus for the increase in the life expectancy of these funds and for their better utilization and help in the struggle against idleness and the undue prolongation of repairs.

The role of depreciation charges in cost accounting consists also of the following: an increase in production with the same number of shifts and the same intensity of equipment does not lead to an increase of depreciation charges, i.e., it leads to reduction of costs. When the number of shifts and intensity of equipment increase, the rate of depreciation charges and their total amount increase at a slower rate than the volume of production, with the result that depreciation charges in the unit cost is reduced while accumulations are increased.

However, because depreciation charges are a relatively small proportion of the unit cost the effect of this system of stimulation is not sufficiently great. Moreover, this effect is weakened by the fact that concerns are not responsible for the consequences of utilization of basic funds and their production. This may be seen in particular from the fact that the loss of some basic funds is not reflected in the cost of the product and in the profits of the concern, but only on the statutory fund. When there are losses because of small depreciation charges, the statutory fund is reduced and the national wealth is reduced by the same amount.

Thus, the main defect of the existing system of depreciation charges consists in their weak relationship to the principles of cost accounting because depreciation charges only partially are reflected in the expenditures of production so that the cost of the products, not infrequently, becomes underestimated and accumulations exaggerated. Losses to the national economy because of too low depreciation charges are not taken into consideration. Absence of "control by the ruble" over the use of a concern's basic funds and over the full replacement of their value undermines the basis of cost accounting, weakens economic discipline and does not stimulate the concerns to utilize the means of labor carefully, to carry out good repairs on time, etc.

Every year, on the average, about 2% of functioning basic funds are written off because of wear and tear and other causes. With the progress of technique the sum of annual depreciation charges increases together with their importance as a source of reproduction of the basic means. An average annual sum of depreciation charges in prewar years amounted to 8 billion rubles and in the 1956 budget to 23.1 billion rubles. Now it exceeds 60 billion rubles, of which approximately 58% is spent on capital repairs and about 42% on new construction. Reinvested depreciation charges in capital investments is 15 to 17% of the entire national economy.

If the concerns use scientifically justified rates of depreciation charges and rationally utilize their basic means, they have sufficient means for capital repairs and they should have accumulated sufficient means to replace the value of basic means lost through wear and tear. However our industry suffers losses from the disposition of basic means written off because of dilapidation and wear and tear. These losses grow from year to year. In 1952 they amounted to 4.2 billion rubles, in 1953 to 4.8 billion rubles, in 1954 to 6.1 billion rubles. Losses from the disposition of such funds in 1955 amounted to 17.8% of the original value of the petroleum industry funds and to 46.3% in concerns of the building materials industry. Because of premature wear and tear of the basic funds, and especially of the equipment, only part of such funds in the coal industry is covered by depreciation charges, while most is simply written off annually from the statutory fund on the basis of special acts to the amount of more than a billion rubles. Between 1951 and 1955 such losses in the coal mining industry amounted to 6.7 billion rubles. Such a procedure does not stimulate the struggle for lengthening the life expectancy of the new equipment, for more effective utilization of all means entrusted to the concern.

All these facts show that the rates of depreciation charges are lower than they should be, that the existing regulations are to a considerable degree obsolete, that they do not take into consideration the necessary technical and organizational level of production. The rates applied do not take into consideration new intensive methods of work such as speed cutting with the use of great power, processing with the help of pressure, etc. For example, the rate of depreciation charges for industry as a whole amounted in 1956 to 5.3% of the original value of the funds as compared with 5.2% in 1940. Yet the postwar period is characterized by a much larger equipment load. Out of these depreciation charges about half in 1940 and about as much (2.6%) in 1956 were spent on capital repairs which made it possible to modernize equipment, at least in part, and 2.7% were spent on capital construction (replacement) of the worn out funds.

The rate of depreciation in the state industry in case of two-shift work is based on the following length of service: production buildings of usual type (stone, concrete, ferro-concrete) — 38.5 years, of lighter type — 31 years, of structures — 50 years, of equipment — ten to fifteen years. However, when we take into consideration that the replacement rate — for the new basic funds to take the place of those which are completely lost — amounted, for exampl in 1956 to 2.7%, it will be clear that a full period of repl ment of the original value amounts on the average to 37 38 years, which means that the rates for the equipment preciation — the most active part of the funds — are low than they should be. As a result in many concerns the actual wear and tear of basic funds is considerably high than the estimate of wear and tear shown in the balance sheet.

Losses from the disposal of the worn out basic produc tion funds are the result not only of too low evaluation o such funds, but also the result of their careless mainten and too high a cost of capital repairs. Among the causes this is the violation of the principles of cost accounting. these principles were followed, the value of the basic m could be restored with the help of depreciation charges. This logically follows the principle of cost accounting ba on a comparison of all expenditures made by the concer with its income from the realization of the product.

Insufficient material stimulation and absence of mater responsibility of the concerns for the effective use of ba production funds entrusted to them and for their reprodu tion results in such practices as disassembling of machi for obtaining spare parts, writing off the value of the eq ment still suitable for use in order sooner to get new eq ment, not taking measures for the timely, "prophylactic current and capital repairs, poor quality of maintenance machines and buildings, etc. Under such a system the c cerns are not interested in the formation of depreciation funds or in the reduction of large reserves of equipment which is not installed or utilized.

Yet the essence of the socialist mode of production, w is developed in the interests of every worker, requires strict observance of the principle of the primacy of stat interests. In this connection we have the task of strengt ing the economic stimuli of the collectives and of each i vidual worker to preserve and increase the common pro erty in the means of production.

It is high time to reexamine and improve the connecti of the system of depreciation charges with the principle of cost accounting in order to improve the utilization of basic funds.

Depreciation charges are an element of the cost of the product in the volume of socially necessary work neede for reproduction of the expanded elements of basic fund Characterizing the transfer of the value of the impleme of labor, Marx wrote that wear and tear "is that part of value which the basic capital through its use gradually transfers to the product, transfers at an average rate a which it loses its consumption value." (Marx, "Capital,' Vol. II, p. 167.) Consequently in determining the rate of preciation charges we have to take as a base not the original value of the basic funds (the total sum of expen tures for their acquisition, transportation and assembly but the cost of their reproduction under present conditi that is, their restoration value. This is the result of the action of the objective economic laws and helps to solve practical tasks of the better use of basic means.

The existing procedure of evaluation of the larger pa of the basic funds by their original value results in gre differences in prices for the same elements of equipme introduced at different periods, because of the growth o labor productivity and also because some machine tools mechanisms, appliances, etc., were made at the concern self. Moreover in many cases the equipment was suppli at prices which were lower than their value, as well as their cost.

In some cases, without serious reasons, some expend ures which are socially necessary — for example, the work of geological surveying (beside expenditures for prospecting drilling in the petroleum industry, this includes the cost of drilling for exploitation purposes) — are excluded from the value of the basic funds. In view of this the data concerning the value of the basic funds, the rate of depreciation charges, the cost of the product and the financial results of the disposal of basic means are distorted.

All this results in different evaluations of the same kind of machines, equipment and buildings, in different rates of depreciation charges, and in this way makes more difficult normal reproduction of basic funds and weakens cost accounting.

A reevaluation of the basic means by their replacement value was carried out in 1952. The USSR Council of Ministers, having noted a lack of unity on this question and other shortcomings of the evaluation of the basic production funds, ordered a revaluation of the basic funds of the national economy at their present value in order to ensure their reproduction and preservation and to determine the rate of wear and tear and the rate of depreciation charges. The realization of these measures will help to strengthen cost accounting.

In the last five to seven years the cost of such construction machines and mechanisms as excavators, cranes, etc., was reduced on the average three times; the balance sheet value of the existing machines is approximately two times higher than their cost (considering the existing wholesale prices). In connection with this the cost of mechanized work carried out by construction organizations which use new, cheaper machines, was reduced by 15 to 20%. At a conference of the State Committee of Construction Affairs at the USSR Council of Ministers the opinion was unanimous that depreciation charges on construction machines and equipment should be calculated on the basis of their replacement value — existing prices — and not their original value.

The great advantages of this system consist of the fact that it makes it possible to consider to a certain degree the obsolescence of the funds. The reevaluation of funds connected with wear and tear under socialism does not result in any losses, because it is possible to accumulate means for the replacement fund. Moreover, lowering the costs of the means of labor results in the growth of accumulations. The necessity to consider obsolescence presupposes replacement or modernization of the existing equipment. However, in our industry the share of the obsolete equipment is still quite high, even in the best branches. Our country suffered great losses and destruction in the war of 1941-1945. Material losses, military expenditures, and the loss of revenue during the years of war amounted to 2,569 billion rubles or 485 billion dollars. How large this sum is one may see from the fact that the whole national wealth of the United States in 1949 was estimated at 898 billion dollars. If means equal to our losses, were spent on peaceful construction, the Soviet Union would now have the best production apparatus in the entire world and the level of its production of the most important goods would approach that of the United States.

The replacement of the parts of the basic funds, necessitated by obsolescence before their physical wear and tear, results under socialism in a loss of a part of the value of equipment; but these losses are more than covered by savings which result from the replacement of the old technique with new and of new technique with the latest. The economic advantage of a machine can be determined as the difference between the amount of labor expended on its production and servicing and the amount of labor saved during its normal period of functioning. The magnitude of the economy of social labor from the use of the latest technique may be seen from the following example: the use of the steam turbine 300,000 kw capacity which is being built by the Kharkov electromechanical plant saves annually for the power stations a sum of 25,000,000 rubles or almost double the value of the turbine itself.

The reevaluation of the basic funds by their replacement value, now in preparation, will make it possible to apply the same value to all means of labor of the same kind and improve the price formation of the means of production, will serve as a starting point for calculating the coefficient of lowering the cost of reproduction of equipment, and this, in turn, will make it possible to simplify and greatly reduce the cost of reevaluation of production funds in the future.

Planned restoration (replacement) of basic production funds depends not only upon their evaluation but also upon the rate of depreciation charges. A question arises here: should we, in determining the rate of depreciation charges, consider obsolescence of basic production funds?

In order to prevent losses connected with obsolescence of equipment some economists suggest an increase in the rate of depreciation charges; they advise taking into account not only wear and tear, but also obsolescence, and they support this suggestion with quotations from Marx and Engels and with examples from the practice of modern capitalist monopolies (see, for example, an article by A. Stepankov "On the Problem of Reproduction and Depreciation of the Means of Labor," "Problems of Economics," No. 3, 1957). Other economists sharply criticize the suggestion itself and the reasons for it because to a certain degree it means a denial of the objective character of the depreciation phenomenon (see an article by Academician S. Strumilin in "Problems of Economics," No. 8, 1956, p. 50 and by A. Pervukhin in the same publication, No. 1, 1957, p. 117 and others).

The bases for determining the rate of depreciation charges are the real, objective processes in which they are utilized and the period of service, in other words, physical wear and tear. Marx wrote: "Leaving aside its purely symbolic expression as a sign of value, value exists only as the consumption value of a thing... In view of this the loss of consumption value means the loss of value itself" (Marx, "Capital," Vol. I, 1954, p. 209).

On numerous occasions Marx and Engels exposed mistaken, apologetic statements of the bourgeois economists and businessmen about periods of basic capital renovation. In connection with a statement by Babbage, that in Manchester the main portion of machine equipment on the average is renovated every five years, Engels noted: "No doubt, there is no ordinary large-scale enterprise in England which would renovate all its machine equipment every five years. If one were so stupid as to do this, he would be bankrupt at the time of his first renovation..." (Marx and Engels, Letters about "Capital," Moscow, 1948, p. 62). In "Capital" Marx used a ten-year period for the wear and tear of the equipment of a spinning mill and emphasized that these data were authentic. In speaking of obsolescence he showed the role of capitalist production relations in delaying technical progress, as shown by the fact that the old fixed capital delays the introduction of new technique and compels capitalists to buy up and hold off innovations in order not to let competitors use them. That is why, among other things, the role of crises of overproduction is so great in the renovation of technique.

As to the practice of contemporary capitalist industry, the policy of quick writing off carried on in the capitalist countries makes it possible for the monopolists not only to show part of their profits as expenses of production and in this way to avoid payment of taxes, but also to raise prices and obtain additional profits. Here we see the predatory character of capital, the self-financing of the monopolies (which are most closely connected with the state) at the expense of the budget through non-payment of taxes.

The rate of depreciation charges in the USSR in that part which has as its purpose the replacement of the worn out means of labor (capital construction) is about half of the rate applied in the United States. That the rates of depreciation charges in the United States are inflated artificially may be seen from the statistical series of changes of the average rate of depreciation charges, for example, in the manufacturing industry. Here we should also take into consideration the fact that in the United States the rate of depreciation charges does not include expenditures for capital repairs. These expenditures, just as expenditures for current repairs, are treated as production expenses.

The Rate of Depreciation Charges in US Manufacturing Industry in 1939-1954 (Percentages)

1939	1941	1942	1943	1944	1945	1946
3.9	4.3	4.8	5.3	5.7	6.6	4.1
1947	1948	1949	1950	1951	1952	1954
4.7	5.2	5.2	5.3	5.7	6.0	5.6

Source: "World Economics and International Relations," No. 5, 1958, p. 141

On the whole the rate of depreciation charges in US manufacturing industry increased 44% between 1939 and 1954. Inflated depreciation charges are covered from the national income: this is one of the means of enriching the financial magnates, a means of increasing their profits.

It is significant that while the production capacity of US manufacturing industry increased 75% between 1945 and 1954, the sum of annual depreciation charges of the corporations which own concerns of that industry increased 283% during the same period and this in spite of the fact that only half of the production capacity was used in 1954. Capital investment in US manufacturing industry amounted to 11.24 billion rubles in 1954, while the annual sum of depreciation charges was six to eight billion dollars.

What economic consequences would such a practice have under socialism? Increasing depreciation charges as compared with the actual wear and tear in effect would mean an artificial increase of the cost of products and a reduction by the same amount of the accumulations of the concerns. The suggestion of some economists to increase the rate of depreciation charges through taking into account obsolescence, so far as it is not reflected in the actual wear and tear of the funds, can be realized either through reduction in production necessitated by an increase in price, or through reducing the net income or profits of the concerns; in both cases the source from which losses connected with the replacement of equipment before its physical wearing out are covered is the national income. The first method of replacement should be excluded as being in contradiction with the very essence of the socialist mode of production; as to the second source of compensation through reduction of profits of the concerns — in this case society, while gaining nothing in saving labor, loses in the volume of accumulations. In addition society loses precision in accounting for production and in calculating cost and this would lead to a certain arbitrariness in determining the magnitude of the rates.

A. Stepankov's suggestion that because of the growth of productivity of social labor and corresponding reduction o the cost of new machines "the depreciation of the basic funds ... must be compensated for by an increase in the rat of depreciation charges" (see "Problems of Economics," No. 3, 1957, p. 117) is mistaken because in view of the reduction of the cost of the new equipment the old rates (without their increase) would ensure not only a simple, but also an expanded reproduction of funds.

This shows that the question of obsolescence of techniqu and of methods of accounting for it, which have great theoretical and practical value, needs further deep and compre hensive study. There is a need for the generalization of ou practical experience.

As to the suggestion to increase the rate of depreciation charges in order to take into account the obsolescence of equipment, the coming census — revaluation of the basic funds — makes it superfluous. This revaluation will be made according to replacement value thus removing the consequences of the violations of the law of value in determining the balance value of the basic production funds and that part of their value which is really transferred to the manufactured goods.

Under conditions of planned socialist economy the losse connected with obsolescence are considerably smaller tha under capitalism. As was noted, the apparatus of production is used under socialism much more intensively and there are ample possibilities of renovation of obsolete ma chines and their use in those sectors of the economy wher they are still sufficiently productive.

The most important factor in lowering losses from obsolescence of machines and equipment is improvement i the utilization of the tools of production as well as their timely modernization. Thus the coefficient of shift work a automobile plants in 1956 was only 1.55. The planned wor ing time of the Minsk Automobile Plant for two shift work amounted to 56% of the calendar time in 1956, but actually the coefficient of shifts in the main production sections of the plant varied between 1.2 and 1.43. The plant had serio stoppages during the shifts — the result of poor preparati of production, technical and organizational defects, the state of production and labor discipline as well as shortag in material-technical supplies. The possibilities of utilizi machines intensively here are especially great.

Some authors suggest using balances of equipment in de termining the life expectancy of machines and correspondingly the rates of depreciation charges (see the symposiu "Depreciation in USSR Industry, 1956"). This point of vie deserves serious criticism. In the Sixth Five-Year Plan the planned volume of equipment production makes it possible — if industry produced only for the domestic marke to replace annually 1/17 of the number of forging-pressin machines. If half of the newly produced equipment goes into expanded production, the share of the annually replac equipment will be cut in two (see "Problems of Economic No. 9, 1957, p. 137).

The available data show that if we determine the rates depreciation charges on the basis of equipment balances, these rates will be too low. The cause of this underestim tion lies in the fact that there is no connection between su rates and the real wear and tear of the functioning basic production funds. In view of this such rates are not an ob jective index of actual wear and tear; they would lead to losses because of too low accumulations to replace the w out machines and they make it difficult to determine whet it is advisable to utilize various kinds of equipment or to carry out their capital repair and modernization.

However, this does not mean that we may leave the exis ing rates of depreciation charges as they are: they are obsolete; in many cases they are too low, and they contribute little to technical progress. The existing rates of depreciation charges, differentiated by the elements of the basic production funds, were introduced in 1930. In 1938 average branch rates of depreciation charges were applied. Further refinements were introduced in 1949, 1951, and 1955. The existing rates of depreciation charges are not scientifically determined differentiated rates of depreciation charges, they are basically still the rates of 1930 differentiated only to a certain degree. Not infrequently such rates are determined not on the basis of the average life expectancy of various elements of the basic production funds, but on the basis of the cost of the product, rentability of production and the need for means for capital repairs. The rate of depreciation charges for restoration of the worn out funds (renovation) is too low; it presupposes wear and tear in machine building in 30 to 35 years, in machine tool production in 28 to 33 years and so on. The applied rates do not reflect the successes achieved in technical progress: the variety of the elements of the basic production funds, the high intensity of their use and their more rapid wear and tear. The law of planned development of the national economy and the law of value require, first, establishment of the same rate for the same elements of the basic production funds irrespective of branches (provided they are used with the same intensity) and, second, they require differentiation of rates by elements of funds according to their production-technological destination and life expectancy.

The purpose of the rates of depreciation charges is to ensure accumulation of necessary sums for replacement, to help achieve the fullest use of production facilities, to stimulate the attitude of material responsibility on the part of the personnel of the concerns and to ensure timely renovation of machines and equipment. In connection with this we have to carry out the suggestion made by many economists to establish different rates for capital repairs and for renovation (see the article by P. Bunich, "Cost Accounting and the Use of the Basic Funds in USSR Industry," "Planned Economy," No. 5, 1957). Socialism is characterized by a high rate of growth of labor productivity and especially of tools of labor. As replacement in kind here is separated in time from the replacement in value, the accumulated depreciation charges make it possible not only to achieve simple reproduction, but also some expansion of the basic production funds.

Having noted the existence of great possibilities for further improvement in the use of equipment, the 20th Congress of the CPSU pointed out that it is expected during the Sixth Five-Year Plan to obtain more than half of the growth in production of automobiles, granulated sugar, meat, canned goods, more than one-third of the growth in production of footwear, woolen fabrics, etc., through better use of the existing industrial equipment.

Further strengthening and improvement of cost accounting, including changes in the existing procedure for determining the financial results of the disposal of the basic production funds is an important condition for the more productive utilization of equipment.

The purpose of depreciation charges is to ensure restoration of the means of labor, that is, to make possible expenditures for capital repairs and for replacement (renovation) of those which were worn out. In our practice of writing off the value of the worn out and dilapidated funds we frequently suffer losses as a result of a too low rate of depreciation charges. In some concerns these losses are the result of negligent treatment of the equipment.

As an example of poor use of technique, or worse, of undue delay in the start of machine operation and negligence in their treatment we may give the following illustration. As early as in 1953 the Minsk Automobile Plant ordered a lamp generator of high frequency to dry up cores for its foundry section of forged pig iron. The aggregate was designed and produced in Leningrad. It arrived at the plant in 1954, but was not installed and in 1957 was written off and disassembled (all its instruments were broken, the body dented, the auxiliary equipment lost). A 1,250 ton press for stamping details of the new model MAZ-502, which was to be produced by the same plant, was to start functioning in the pressing section of the plant in 1956; yet as late as in 1957 the press stood idle. In the chassis section hydroduplicating supports are not used, etc.

One of the most important causes of these shortcomings is violation of the principles of cost accounting, namely that the existing regulations concerning the use of equipment do not make the concerns responsible for the restitution of replacement value. Irrespective of the amount of losses because of insufficient depreciation charges, the value of the lost basic production funds is written off the statutory fund of the concern and this in no way is reflected on the material-financial position of the concern, though the people's funds are reduced by the amount written off.

Some economists affirm that the losses which take place when lost funds are written off are not real losses, but only reflect in the balances of the concerns' "depreciation charges which were not put aside in due time." Yet in fact when the accumulated depreciation charges are not sufficient for the replacement of lost funds, this means a reduction of the state resources for capital construction at the expense of the centralized depreciation fund and this necessitates an expenditure of considerable means from the national income.

Practice shows that in order to strengthen cost accounting discipline and stimuli for better utilization of basic funds, the depreciation charges should be made on all the equipment of the concern, even that portion which stands idle because of the concern's fault. Of course, depreciation of unused basic funds will be only theoretical. Though unused basic production funds lose to a certain degree their original qualities, yet they are not depreciated, because this loss is not connected with production. Though the depreciation of unused funds is theoretical, it is permissible and in practice it is advisable to collect depreciation charges on the whole equipment entrusted to the concern because this will stimulate the management of the concern to shorten the period of repairs, not to delay installation of the equipment, to use it effectively, to expedite sale to other concerns of the obsolete or unneeded equipment, to free the excess of production area and to stop spending means on storage of the equipment.

We must widely apply technically justified rates of equipment use and increase the responsibility of those in charge of sections and concerns for effective use of the equipment. A proper determination of the source from which the losses from the disposal of the basic funds are compensated also will help to end careless treatment of machines and installations. As to the losses from natural calamities, they should be covered — as they have been — at the expense of society — from the national budget. Losses resulting from carelessness of the concern should be covered from its profits.

Of decisive importance for the increase of life expectancy of machines and equipment, their better use and reduction of the cost of their utilization, is the quality of the manufactured means of labor. We should quickly discontinue the production of obsolete equipment which wears out or becomes obsolete considerably ahead of the normal period for the loss of its consumption value and, in this way, before the accumulation of the depreciation charges becomes equal to replacement value. Losses caused by the disposal of the equipment before the planned moment are not losses for the national economy. At the First State Ball Bearing Plant, for example, autooperators and other devices which transform machine tools into automatic tools have been invented and widely applied for a number of years. Yet the machine tool plants of Leningrad, Kharkov and Kiev have not followed this example and continued to produce for the ball bearing industry semiautomatic tools as a result of which the ball bearing plants themselves have to carry out automation and modernization of the new equipment. The State Arbitration Committee correctly decided that the losses of the concerns caused by utilization of such obsolete equipment should be covered with the profits of the producers of such machines.

In order to stimulate a more careful approach to the funds which continue to function after accumulation of the full depreciation fund, to increase their load and their life expectancy, it is advisable to stop collecting depreciation charges on such funds except for that portion of them which is needed for capital repairs. In order to avoid stimulating the use of obsolete technique we must tie up directly the financial results of the concerns with the system of bonuses and their size. Important conditions for the more effective utilization of the basic production funds are the further improvement of planning and material stimulation of technical progress, strengthening cost accounting, increasing material responsibility of the concerns and business organizations for timely modernization, fuller utilization of basic funds entrusted to them and increasing their life expectancy, preserving and renovating them on a higher technical level and carrying out production and financial plans in their entirety. A system of depreciation charges stimulating the fullest use of the basic funds, increasing material responsibility and the interest of concerns in timely renovation of machines and equipment is an important factor in accelerating technical progress in our economy.

It is also high time to improve the planning, accounting and carrying out of capital repairs. Among the causes of losses resulting from the loss of basic means in many concerns is the high cost of repairs which exceed the part of depreciation charges laid aside for this purpose. We have cases in which the repair of some machines exceeds the cost of these machines. For example, manufacturing of a screw-cutting lathe takes from 300 to 400 standard hours, but its capital repair takes from 540 to 900 such hours. Manufacturing of a new loading machine requires 170 standard hours, but its capital repair takes 600 hours plus a considerably larger expenditure of metal and other materials. A new DIP-200 machine costs 9,700 rubles, but its repair at the Klin Plant costs 20,000 rubles.

In some cases capital repairs result in increased losses connected with obsolescence of machines, because frequently production of machines repaired ceased long ago because their productivity was too low. Actually the purpose of capital repair is not only restoration of the former productivity of the machine, but, if possible, its modernization, bringing it up to the new level of technique. And the basic rule should be: capital repairs should cost less than the new equipment!

As a rule, capital repairs should be accompanied by modernization. The example of the collective of the First State Ball Bearing Plant shows what can be done at the plant itself. In the last seven years this plant designed and installed seven group automatic conveyer lines, 20 mechanized and conveyer lines, modernized 950 units of equipment, manufactured 550 new machine tools, machines and mechanisms and 50 automatic and semiautomatic machines whi replaced hand operations requiring much labor. They installed in the plant sections 200 controlling and sorting automatic machines, 750 appliances for active control of machine tools and more than 800 units of lifting-transport ing equipment. As a result of the use of this new techniqu they saved the labor of 3,000 men. In 1957, as compared 1950, their production increased 2.5 times, labor productivity 3.2 times, costs were reduced 45% and annual savin exceeded 11 million rubles.

Part of the expenses of modernization is covered by depreciation charges assigned to capital repairs. As the pu pose of modernization is to bring the old equipment to the level of the new, in other words, to overcome the consequences of obsolescence through installation of more com plex and more expensive units and details, credits for it should be granted by the USSR State Bank. We also canno agree with the thesis that all expenses of modernization should be financed from accumulations (see the article by S. Strumilin in "Problems of Economics," No. 8, 1956, pp. 51-53).

The high cost of capital repair of the means of labor is frequently a result of carrying out such repairs in a decentralized way, by the plants themselves, in small numbers, with insufficient mechanization and specialization o repair work. Up to recent time each plant, even the small ones, had its own repair-mechanization section, an instru mental section, and sometimes even produced special machine tools and equipment.

The experience of the best plants, in particular of the Moscow and Kharkov automobile plants, showed that throu the use of the unit repairs and quick, planned "prophylacti repairs (the worn out units and details of machines and equipment are replaced without long idleness according t the strictly followed chart of planned "prophylactic" repairs) idleness necessitated by repairs was reduced by 50 to 80%. On the basis of this experience many economi councils organized centralized manufacturing of spare parts, concentrated at specialized plants the repair of equ ment and measuring instruments, organized cooperative power installations, etc. This made it possible to free substa tial production capacities for an increase of basic productio

Of great importance is the establishment by economic councils of specialized concerns for capital repairs and modernization of machine tools of the types and models which are most frequently met. This permits the use of t latest technology, improves the quality of repairs and sav millions of rubles. If we carry out measures of strengthe ing economic stimuli, this will create even more favora conditions for the rapid growth of industry. It is high tim to establish the same structure and to work out standard for the repair of large units in order to end the existence an enormous number of existing standards of an experim tal-statistical character and to change the system of plan and accounting of capital repairs.

Serious attention should be given to modernization and distribution of the surplus equipment freed in this proces In connection with changes of technological processes, of nomenclature of goods, etc. about 30,000 machine tools a forging-pressing equipment are freed annually. Accordin to the CSA as of January 1, 1957, about 12,000 units of fr equipment could be utilized in the Soviet economy. Many concerns are in great need of these machines.

Putting an end to the idleness of machines and mechani increasing cooperation in the utilization of equipment an increasing its productivity through good maintenance, hig quality repairs and modernization, would mean bringing action great reserves of equipment which would help exp the development of socialist industry.

M. Vilensky:

Some Problems of the USSR Electric Power Balance in Light of the Tasks of the Long Range Plan

The electric power balance is one of the most important naterial balances in the structure of the USSR economy. ts analysis makes it possible to trace the changes which iave taken place in the production and consumption of power, o find means for the further expansion of the power base of he country and to determine the long-range elements of ower consumption from the point of view of the main direcions of modern technical progress.

At all stages of socialist construction the growth of power roduction proceeded at a faster tempo than the development of the economy as a whole. For example, between 1913 and 957 the gross product of industry increased 33 times and roduction of the means of production (group "A") 74 times. During the same period production of power increased more han 100 times. Such a ratio between the development of ndustry and power production is natural and is caused by he main tendencies of technical progress. Technical re-quipment of the USSR economy demanded a faster growth of power production. To a considerable degree this was chieved through concentration of production and centralizaion of power supply.

The establishment of large power grids, and on this basis entralization of power supply, is the main element of the naterial production basis of socialism. Centralized supply f power to various USSR regions, branches of economy and umerous concerns raised the level of collectivization of roduction. Centralization of power ensures power availaility and absence of breakdowns in supply. Establishment f power grids is the basis of concentration of production n the power industry. Because of the concentration of prouction at the large and very large power stations the ecoomic level of Soviet power production has been greatly aised.

Under the Soviets dozens of regional and interregional ower grids were established, among them the entral, Southern and Ural stations which serve territories rom 500,000 to 750,000 square km. The part of power rids in the total production of power rose from 38.9% in 928 to 83% in 1956. The building of a power network of igh tension proceeded rapidly, though it lagged somewhat ehind the needs of the economy.

As a result of carrying out Five-Year Plans the level of oncentration of power production has greatly increased. uring the First Five-Year Plan most power stations were 25,000 to 100,000 kw capacity; now most of them have a apacity of 100,000 kw or more. This group of power staons has about half of the installed capacity and produces bout 60% of the total power. Typical of Soviet power prouction are thermal electric power stations of 300,000 to 00,000 kw capacity. In the Sixth Five-Year Plan we began onstruction of a number of thermal power stations with ore than one million kw capacity each. The capacity of rbines and generators also has considerably increased. 1956 thermal power stations had in operation 39 turboenerators of 100,000 kw and three turbogenerators of 50,000 kw capacity. In 1955 the share of high pressure installations made up 57% of the total capacity of thermal power stations as compared with 3% in 1940. At present 95% of the newly installed capacity at the regional power stations is made up of the aggregates with parameters of steam 100 atmospheres and 500° C.

Important changes also took place in the structure of the power stations: in 1913 hydroelectric stations produced only 1.8% of the total; in 1956, 15.1%.

Large scale electrification of the national economy became possible not only through a sharp increase in the volume of power production but also through lowering its cost and improving technical-economic indices of production. Thus, expenditure of fuel per unit of power in regional thermal stations in 1955 was reduced, as compared with 1940, by 20%, the number of hours of operation increased during the same period by 6%, the productivity of labor increased by 91.8% (as expressed by the number of workers per 1,000 kw of installed capacity). The cost of power in 1955, compared with 1940 (in constant prices), was reduced 27%.

The Party set the following task for our planning organs — to draw up a general plan for USSR economic development for the next 15 years. In this plan there should be outlined concrete measures for the construction of a communist society in the Soviet Union.

In this general plan one of the leading places is given to power. It will continue to develop at a faster tempo than other branches of industry. While production of iron ore will increase in 15 years from 3 to 3.5 times, coal 1.4 to 1.6 times, oil 3.5 to 4 times, pig iron 2 to 2.3 times, steel 2 to 2.4 times, production of power will increase 4 to 4.5 times.

According to the preliminary estimates production of power after three or four five-year plans should reach 800 to 900 billion kwh. This means an annual increase of power production of 40 to 46 billion kwh. Ensuring such an increase is a complex and difficult task, but, as the preliminary calculations show, it is feasible.

In order to produce annually 800 to 900 billion kwh, the capacity of power stations (considering necessary maintenance and emergency margins) should reach 200 to 250 million kw. It is necessary for this long range period to establish a proper ratio between the growth of capacity of power stations and the generation of power. For an increase in generation of power of 4 to 4.5 times the capacity of power stations should increase from 4.1 to 5.1 times, which means that every year we should install 10 to 13 million kw or almost 3/4 of the capacity installed during the whole First Five-Year Plan. We can carry out such a grandiose program only through the construction of large and very large power stations which require less capital investments per unit of capacity. Most of the stations built will be thermal stations of 600,000 to 1.2 million and 1.8 million kw. At present 30 thermal stations of capacity over one million kw are in the designing stage. We also started the designing of thermal stations with 2 and 2.4 million kw capacity. The largest power stations with aggregates of great capacity are very effective economically. The cost per kw of capacity of power stations with aggregates of 100,000 kw, compared with stations where aggregates are 25,000 kw each, is cut in two. Capital expenditures on construction of thermal power stations of 1,200,000 kw with 200,000 kw turbogenerators, compared with stations with 100,000 kw turbogenerators, is 30 to 35% lower. Thermal power stations allow the use of the block (blochnaya) scheme — boiler — turbine. The capacity of individual aggregates may be brought to 600,000 with the parameters of steam 230 to 240 ata and 580°C. The savings which are possible in the construction of such stations may be seen from the following data:

	Regional power stations with capacity of 600,000 kw., having six aggregates of 100,000 kw. each	Regional power stations with capacity of 1.2 million kw., having six aggregates of 200,000 kw. each	Regional power stations with capacity of 2.4 million kw., having four aggregates of 400,000 kw. each
Cost per installed kw. capacity in rubles, in budget prices of 1955	1,100	800	629
Expenditure of theoretical fuel, grams per kwh.	420	336	300
Expenditure of power for the needs of the stations themselves (% of the output)	7.8	6.5	6.4
Personnel (thousands per 1,000 kw.)	2.1	0.5	0.33
Volume of the main building (cub. mt. per kw.)	1.15	0.6	0.36

During the period of the long-range plan the power capacity of hydroelectric stations will be increased chiefly through utilization of the water power of eastern regions where conditions for construction of such stations are especially favorable.

The construction of large power stations produces the greatest effect when they are united in a grid. Isolated work of such stations requires great margins and this increases costs. In view of this the general line of power development in the near future will remain the centralization of the power supply. An advance will be made to the higher form of centralization when regional and interregional grids are united into one grid for the whole country. The first step in that direction has been made. In 1956 the construction of a high voltage transmission line was completed. It connected the Lenin hydroelectric station on the Volga with the Central grid. Another line is being built which will connect that station with the Ural. In the near future we shall complete the construction of the Stalingrad hydroelectric station and the high voltage transmission lines connecting it with the Central and Southern grids. When the three largest power systems in the Soviet Union — the Central, the Southern and the Ural grids — are united into one, this will complete the first stage in the construction of one grid for the European part of the Union. It will cover an area of 2.7 million sq. km and extend 2,700 km from west to east and 1,500 from north to south. We may assume that by the end of the long-range plan this grid will be connected with the grids of the Northwest and Transcaucasia. The decisions of the 20th Congress of the CPSU foresee the start of construction of a single power system for Central Siberia. The basis of this system will be formed by the hydroelectric stations of the Yenisei, Angara, Ob and Irtysh as well as the largest thermal stations in locations of the open cut mines. In the more distant future the power system of Siberia will be joined to the power system of the European part of the Soviet Union through the constructio of the Siberia-Ural high voltage transmission line.

The creation of a single power system for the whole co try will be of tremendous economic advantage: it will red to a minimum the needed gross margin because 1) the pe loads in different geographic zones of the country do not coincide in time; 2) the structure of consumers' demand i various regions is different; 3) the fluctuations in the wat discharge of different regions do not coincide in time. A single power system will be an important factor in impro ing the geographic distribution of productive forces and w make it possible to utilize natural resources of regions which do not have their own power base.

The task of the further centralization of the power sup urgently requires an increase in the construction of tran mission lines, which is lagging behind the increase in power capacity. Production of power in the regional systems increased more than 70 times between 1928 and 19 while the length of transmission lines increased only 26 times. Especially great is the lag in construction of high voltage transmission lines, which becomes an obstacle f the long-distance transmission of power. Many 110 kw l were designed and built recently with limited transmissi capacity and the possibility of uniting the systems was n taken into consideration. Such lines, for example, were built between Azerbaidzhan and Georgia, between Bashki and the Chelyabinsk power systems. As a result from 3 to 40% of capacity is lost in transmission of power from Azerbaidzhan to Georgia and the margin of power in the southern Urals cannot be used to cover the shortage of power in the middle and northern Urals. For the succes realization of the general line of power development — centralization — power grid construction should procee ahead of increase in power capacity. We should sharply increase capital investments in transmission lines. Up now we were spending on them about 10% of the total ca investments in the power industry, while the correspond figures are: for the United States 60%, for Western Ger 43%, Great Britain 45% and Sweden 45%. Recently the a average of the newly built high voltage power lines in the US only 4,000 km, which is less than the figure for Western Eu

This lagging of transmission should be overcome. Th experience of construction of special mechanized constr tion columns shows the way to reduce the construction period at less cost and with less workers. In 1956 in th Urals, because of better organization of construction w the period of construction was reduced 35% and the nee for labor 30 to 35%. In the near future the average daily construction of two chain lines on metal transmission owers will be brought to 1.2 to 1.5 km compared with 0.75 o 0.85 km in 1956 and 0.35 km in the thirties. Mastering oltages of 600 to 700 kw and transmission by direct cur-ent will contribute to the further development of the power ndustry.

An important problem in the development of power during he long-range plan is the proper ratio between construc-ion of thermal and hydroelectric stations as well as the mprovement of the fuel balance of thermal power stations. The share of the hydroelectric stations in the power balance f the Soviet Union should be well thought out. This is not nly a power problem — which regime of the united work of hermal and hydroelectric stations in the power system is he best? Here the interests of the whole economy are in-olved because of the character of harnessing water power or the production of power. Construction of large hydro-lectric stations requires per kw much larger capital invest-nents, more construction materials and labor power than he construction of modern thermal power stations. Thus, n the European regions of the Soviet Union the cost of large ydroelectric stations per kw is three times higher than that of nodern thermal stations (even if we include expenditures or the development of the fuel base). In the regions of iberia the construction of such hydroelectric stations as ratsk and Krasnoyarsk requires twice as much capital in-estment per kw as thermal stations and for the smaller tations 2.5 and 3 times as much. The construction of hydro-lectric stations requires on the average 2.5 times more abor per 1,000 kw capacity than the construction of thermal ower stations, while the period of construction is very ong. Not one hydroelectric station was built in the Soviet Jnion in less than four or five years. For example, at the Gorky hydroelectric station the first aggregate produced ower eight years after the start of construction, at the Mongechaur, nine years after and at the Stalingrad station t is expected to produce the first power nine years after. ccording to the blueprints the first power produced by the rasnoyarsk and Bratsk power stations should be produced ix years after the start of construction and, for the com-letion of construction, seven to eight years will be needed, ounting from the start of construction. Thus in construc-ion of hydroelectric stations large means are tied up for a ong period without any return. On the other hand labor roductivity of hydroelectric stations is higher than that of hermal stations while expenses of operating and cost of ower are lower. However socialist society cannot be indif-erent to the question of the means by which results are chieved. Marx wrote: “The scale on which operations can e carried out which tie up labor and means of production or a long period without producing any useful effect is etermined on the basis of social production. Society has o determine on what scale it can carry out such operations ithout damaging other branches of production which not nly consume labor power and means of production, but onstantly or several times a year return consumption goods nd means of production” (Marx, Capital, Vol. II, p. 356). is evident that the ratio between hydroelectric and thermal ower stations will depend upon material means and labor ower which society can assign to the construction of ydroelectric stations without detriment to the solution of e main tasks of expanded reproduction which our country ces at each particular stage of its economic development. his ratio is determined by the balance of the entire econ-my and in particular by the balance of capital investments, onstruction materials and available labor power.

The main goals of the long-range plan are accelerated ex-nsion of the chemical, petroleum and gas industries, of rrous and non-ferrous metallurgy, as well as the solution of the housing problem in the next ten to twelve years. The solution of these problems requires tremendous material and labor expenditures. In view of this our economy during this period cannot divert large material and labor resources to the construction of large hydroelectric stations which for a long period do not bring any return. The problem of bringing the production of power up to 800 or 900 billion kwh a year should be solved in the shortest possible time with the smallest capital investments and expenditure of labor, chiefly by means of the construction of thermal power stations. Comrade N. S. Khrushchev in his speech at the meeting of the construction workers of the Lenin Power Station on the Volga pointed out the great advantages of constructing thermal power stations: “Under present conditions the most important thing is to gain time, to shorten the period of construction and to obtain more power at a smaller expenditure... I have in view the preferential construction of thermal power stations in order to gain time in the competition with capitalism, to catch up with and overtake the United States in per capita production.” The preferential development of thermal power stations will make it possible to satisfy the need of the Soviet Union for power in a shorter time.

Another circumstance supports the decision to expedite construction of thermal power stations: recently great progress in thermal power station technique resulted in reducing the relative advantages of water power. This may be seen from the comparison of indices of the cost of power for the large and the largest thermal power stations with hydroelectric stations: they are close to the indices of such highly effective hydroelectric stations as the Bratsk and the Krasnoyarsk. According to the blueprints the cost of 1 kwh of power at Krasnoyarsk hydroelectric station will be .74 kopeks while capital investments per kw (excluding capital investments for other than power purposes) will be 1,400 rubles. The cost of power produced by thermal power stations in Eastern Siberia (of 1.2 to 1.8 million kw capacity) will be 1.76 to 1.87 kopeks per kwh and capital investments per kw (including investments in the fuel base and transportation) 940 to 990 rubles.

This closing of the gap between economic indices of hydroelectric stations and thermal power stations is brought about not only by technical progress in thermal power production, but also by the discovery of large coal basins in Siberia which can be developed by means of open cut mining. Capital investments per ton of coal and the cost of coal at the main coal basins in Siberia are given below:

(In Rubles)

Coal Basins	Capital investments per ton of theoretical fuel	Cost per ton of coal at the mine in terms of theoretical fuel
Itatsky	135	19
Abansky	53	15
Nazarovsky	60	23
Irsha-Borodinsky	74	9
Azeisky	108	18

For comparison we give the following data: in the Donbas, capital investments per ton are 275 rubles and the cost per ton is 85 rubles; in the Kuzbas, the corresponding figures are 185 rubles and 54 rubles. In both cases coal is mined underground.

In spite of high expenditures of coal mining and transportation, the relative effectiveness of water power, compared with thermal power production, also is being reduced in the

European part of the USSR because of technical progress in thermal power production, namely, increasing the concentration of production, greatly increased capacity of the aggregates, and the use of high and super-high parameters of steam. The advantages of such hydroelectric stations in the European part of the Soviet Union as the Saratov, Lower Kama, Dneprodzerzhinsk and Kremenchug stations will become even less compared with thermal power stations if natural gas were to take the place of expensive coals brought from afar such as Kuznetsk, Ekibastuz and Donets coals.

In comparing thermal power stations with hydroelectric stations we should also remember factors which cannot be expressed in precise quantitative form. We have in view goods which could be produced on the land flooded in the formation of water reservoirs for such stations. In designing such stations, when we calculate the economic effectiveness of hydroelectric stations losses from flooding such areas are not fully taken into consideration, though they are tremendous. It is enough to say that if all available plans and schemes of building of hydroelectric stations were carried out, the area of resulting artificial water reservoirs would equal the territory of Estonia, Lithuania, Latvia, Armenia and Georgia taken together. The underground wealth of many Soviet regions, including Siberia, is not yet well known and thus very rich deposits may be flooded. Huge reservoirs which will be formed in case of the realization of the plans for the Lower Ob power stations would flood a substantial portion of the Western Siberian plain which forms a large reserve of Soviet agricultural land. In its subsoil are gas, possibly petroleum and other riches.

All this does not mean, of course, that at the present stage hydroelectric power stations are in general inefficient. As N. S. Khrushchev noted in his speech to the builders of the Lenin power station on the Volga, it would be wrong to choose between construction of hydroelectric power stations and thermal power stations. Hydroelectric stations ensure high productivity of labor. Enormous technical progress in the field of thermal power cannot bring to nought the advantages of hydroelectric power stations in this field. Moreover the construction of hydroelectric stations is connected with the solution of other important problems of the national economy such as water transportation, irrigation and melioration. Proper selection of the objects of hydroelectric power construction is one of the most important problems of the long-range plan. First of all, we should build hydroelectric stations possessing the greatest advantages in the production of power as compared with thermal power stations. Here we should take into consideration concrete conditions of power supply and fuel supply of a given region. Wider harnessing of the extremely rich water power resources in the Soviet Union has to await a time when, on the basis of thermal power stations, we shall reach such a high level of production as to be able to allot large means to the construction of hydroelectric stations without detriment to the solution of other economic problems.

In connection with the predominance of thermal power stations in the power balance of the long-range plan, the problem of improving their fuel supply becomes of great importance.

The availability of extremely rich coal deposits in Siberia leads us to the conclusion that during the period of the long-range plan coal will remain the main kind of fuel in thermal power production there. Large thermal power stations should be built at their fuel bases. In the east surveyed bases are available which allow open mining: Azei in the Irkutsk region, Nazarovo and Irsha-Borodinskoye in the Krasnoyarsk region, Itatskoye in the Kemerovo region, Tom-Usinskoye in the Kuzbass, Ekibastuz in Kazakhsta

The fuel problem in the European part of the Soviet Uni is more complicated. Because of limited coal reserves, t high cost of coal and the necessity of relatively high capit investments in mining, at present up to 20 million tons of coal are brought annually from Kuzbas and Karaganda. If in the future the power development of the European part the USSR depends exclusively upon coal, it would mean transporting coal by railroads and expenses connected wi bringing coal from afar will increase several times. In view of this the most important task for the European par of the USSR is a radical reconstruction of the fuel balance of power stations. This reconstruction should proceed alo the line of replacement of peat and of Moscow, Lvov-Voly and Donets coals with cheaper fuels, namely, natural gas and fuel oil. This part of the USSR has large reserves of natural gas and is the main region of petroleum productio and refining, so that conditions for the solution of this problem are favorable.

Up to now natural gas and fuel oil played a small part i the fuel balance of power stations: in 1955 consumption o gas (in terms of theoretical fuel) made up about 4% and fuel oil 9% of the total fuel balance. The high rate of development of the gas and petroleum industry, foreseen in the decisions of the Party and the government, makes it possible to increase the use of these highly effective fuels for power production. It is expected that by 1965 production of natural gas will reach 145 to 150 billion cub. mt. and in 15 years 270 to 320 billion cub. mt., an equivalent 350 to 400 billion tons of coal. Besides the wide use of ga in the chemical industry, in the municipal economy and in industrial processes requiring high temperatures, this volume of output will make it possible to replace a substa tial part of the coal brought from afar for the power stati with gas. Preliminary calculations show that by 1965 the share of gas in the fuel balance of the Center will reach 28% to 30%, of the Volga regions 39% to 41%, of the weste and northwestern regions 25% to 26%, cf the Ural regions 23% to 25%. Replacement of expensive coals with fuel oil power stations of the European part of the country will sharply reduce the cost of power production. It is enough to say that in the Central regions, according to available information, capital investments in power stations, fuel base and transportation of fuel will amount for gas to 900 rubles, for Moscow coal to 2,050 rubles and for Donets c to 1,400 rubles per kw. The cost of a kwh will be 2 kopek for gas, 7.2 kopeks for Moscow coal and 4.6 kopeks for Donets coal. Bringing the share of gas in the fuel balance to the above-mentioned percentages will reduce the avera cost of a ton of theoretical fuel in the Central regions by 30%, in the Volga regions by 40%, in the Western regions by 24% and in the Ural regions by 18%. The cost of a kwh power in thermal power stations on account of the fuel component will be reduced in various regions of the coun 12% to 25%.

We have had some experience in the use of gas in ther power stations. All Moscow power stations as well as the Dnepr thermal station now use only gas. During 1959-19 it is planned to construct 17 large power stations using g with a total capacity of 11.4 million kw. However, because a wrong pricing system not all the economic advantages gas as compared with coal have appeared. The present sale prices of fuel oil and gas several times exceed their costs and are higher than the sale prices of coal. While t cost of coal is eight times higher than the cost of gas (in terms of theoretical fuel), the average prices charged to regional power stations are 105.3 rubles for coal and 14 rubles for gas. Power stations of "Moscow Power" pay f oscow coal 135.67 rubles per ton and for gas 180 rubles er ton of theoretical fuel). Such an unreasonably high ice of gas does not stimulate its wide use as fuel by pow- stations, because the use of expensive gas does not result a reduction of the cost of power. With the further growth petroleum and especially gas output the prices of differ- nt kinds of fuel should be readjusted so that the use of fuel l and gas would become more advantageous.

Atomic energy has a great role in the improvement of the el supply of power stations, especially in the USSR's uropean part. It is planned to establish a number of large dustrial atomic power stations. In September 1958 the rst stage of an atomic reactor with a capacity of 100,000 w began to function. The full capacity of the station will be 00,000 kw. The second atomic power station is under con- ruction in the Voronezh area. Its capacity will be 420,000 w. Improvement of technology in the manufacturing of ssion materials and their application in atomic reactors ill greatly increase the economic advantages of atomic ergy for the generation of electricity. We may assume at the cost of power produced by atomic power stations in e European part of the country will be no more than the st of power produced by stations using coal. If the prob- m of thermonuclear reactions is solved, the future will be ven brighter in that respect. At present the Soviet cientists are successfully solving this problem.

Ensuring the high rate of growth of power production is e of the most important goals of the long-range plan. me considerations as to how this problem should be lved were presented above. No less complex problems re presented by the analysis of the demand for power. Con- umption of power by the USSR economy increased from .9 billion kwh in 1913 to 210 billion kwh in 1957. These gures show that the Soviet Union has been transformed om a country backward in the field of technique and eco- omics into an economically powerful socialist state with vanced technique and mechanized agriculture, the fore- ost in the world in its scale of operations.

The leading consumer of power is industry (including con- ruction), the share of which since the First Five-Year an amounts to 68% to 70% of the total. Creation of a werful electrified industry served as a basis of technical construction of the whole economy. Naturally then, that dustry is the largest consumer of power. Its consumption power has been growing more rapidly than the gross oduct of industry. Thus the physical volume of gross oducts in USSR large-scale industry increased 39 times tween 1913 and 1955, while the consumption of power dur- the same period increased 78 times (from 1.45 billion h to 113.3 billion kwh).

The high rate of growth of industry's power consumption sulted in an increase of power consumption per worker. wer is the ideal basis for mechanization of production d intensification of the most important technological ocesses. The increase in the productivity of labor in in- stry is brought about first of all by the growth of power nsumption per worker. While productivity of labor in ustry increased 6.8 times between 1928 and 1955, indus- al consumption of power per worker increased 11.8 times.

The development of power production during the Soviet ime resulted in the electrification of operating ma- nes, in a change from mechanical to electric drive. s process in the main has been completed. The coeffi- nt of electrification of production equipment in 1955 ched the figure of 89% for the whole industry. This co- cient in ferrous metallurgy rose from 51.3% in 1928 to 4% in 1955; in non-ferrous metallurgy during the same iod the coefficient rose from 79.3% to 96.2%; in coal mining from 73.7% to 99.5%, in metal manufacturing from 85.3% to 98.1%, in the chemical industry from 73.4% to 97.6%, in light industry from 62.4% to 96%, in the food industry from 24.7% to 78.8%. The use of electric drive has made workers' operations easier, freed production areas, ensured greater dependability and safety of machines, and increased their capacity.

Electrification of the power apparatus of industry is the most important source of increasing the productivity of labor and reducing the cost of production. If electrification of the power apparatus of industry remained at the 1928 level, the 1955 volume of industrial production would require more than 50 million additional workers.

The development of electrification was accompanied by an improvement of electric drive. Electric drive from many motors is a necessary condition for the introduction of automatic aggregates, lines, sections and plants. The revolutionary role of electricity in industry is not limited to the electrification of industry's apparatus. The highest stage of electrification is the wide application of electrotechnology (electrothermal and electrosparking processes, tempering and heating-up through the use of high frequency current, electrodrying, electrochemistry and electrometallurgy). Technological application of electricity intensifies production processes and increases the productivity of labor. The use of electricity not only as power but directly as a tool of labor is the most progressive direction of electrification. It is not an accident that the part of electric power used for technological needs in the total industrial consumption of electricity grows continuously, increasing from 2% in 1928 to 26.4% in 1955. We may say without exaggeration that under present conditions the technological level of industry as a whole and of its individual branches is measured not by the total volume of power consumption, but by the degree of electrification of its technological processes.

No doubt, industry will remain the largest consumer of power during the action of the long-range plan. It is the leading branch of the national economy; it produces the overwhelming part of the social product and of the national income; and it is the basis of technical progress for the whole national economy. Consumption of power by industry during the long-range plan period will grow through expanding the scale of industrial production as well as through structural changes, the rapid development of electrometallurgy and electrochemistry.

The solution of the problem of how to increase the productivity of social labor requires completion of the complex mechanization of production, further development of automation, large-scale transition to electrotechnological processes in the manufacturing industry and wide development of processes using electrolysis, especially in metallurgy and chemistry. The development of technical progress along these lines will result in the growth of power consumption and will change the character of the electrification of industry: the basic lines of the development will be automation and electrotechnology.

Transition to this higher stage of electrification in industry will not cause, however, such a growth of power consumption by industry (which would grow at a more rapid rate than the product) as has been observed until now. Technological improvements of electric motors, automatic machines and electric appliances result in lowering the consumption of power per unit of product. Saving of electric power also will be an important factor in the relative reduction of power consumption at the present stage of electrification. During the first two Five-Year Plans, when the mass change-over from mechanical to electric drive took place, consumption of power by industry was increasing faster than the product. Between 1928 and 1937 consumption of power increased 7.4 times while the gross industrial product increased 4.5 times. During the Fifth Five-Year Plan when industry began automation of production and the introduction of electrotechnology, the difference in the rates of growth was insignificant: consumption of power increased 87% and gross industrial production increased 85%. Correspondingly the share of industry in the consumption of power has been reduced. That in the future the action of the factors reducing the consumption of power per unit of product will be accelerated may be seen from the data of reduction of power consumption, because of improvements in technology, in non-ferrous metallurgy which is a large consumer of power, in the production of aluminum and zinc and in the production of electrosteels and ferroalloys.

We may assume that the increase of industrial production in the next 15 years of 2.5 to 3 times will result in an increase of electric power consumption by industry from 3.5 to 4 times. The share of industry in the consumption of electric power will amount to about 60% as compared with 66% in 1955.

The level of electrification of socialist industry is very high. However the same cannot be said about other branches of the national economy. Thus, the level of electrification of railroad transport shows that it is lagging technologically. Consumption of power by transport increased from 100,000 kwh in 1928 to 5.4 billion kwh in 1955. However, this did not bring a radical change in respect to the electrification of railroads. The share of transport in the consumption of electric power in 1955 was only 3.2%; moreover 57.4% of this power was spent on traction. The length of electrified railroads is only 5,400 km or 4.5% of the total railroad network. The share of electric locomotives in the transportation of freight by railroads was 8.5% in 1955.

During the action of the Fifth Five-Year Plan significant successes were achieved in the electrification of railroads: 2,400 km were electrified, or as much as in the preceding twenty years. The sections of the TransSiberian railroad with the greatest density of freight have been electrified. During the action of the 15-year plan the electrification of transport will greatly advance. The 15-year General Plan of Electrification approved by the CC, CPSU, in 1955, which foresaw electrification of 40,000 km of railroads, may be overfulfilled.

The relatively small scale of power production in the USSR, its relatively high cost, the shortage of non-ferrous metals for the contact network and other factors hindered the electrification of railroads. In the next 15 years these obstacles will be removed. Production of 800 to 900 billion kwh will make it possible to use 50 to 55 billion kwh in transportation or about ten times as much as in 1955. The share of transportation in the consumption of power will increase to 6% or 7%. As a result of the construction of huge thermal and hydroelectric stations railroads will obtain cheap power, and this will increase the effectiveness of electrification. The problem of the transition of railroad traction from alternating current to direct current also will be solved. This will reduce capital investments by 15% to 20% and expenditures of copper three times. The experimental work of replacing alternating current with direct current in railroad traction began during the Fifth Five-Year Plan. At present this system of electric power traction is on trial in the 137 km Ozherelye-Mikhailov-Pavelets section of the Moscow-Donbas railroad.

One of the most important aspects in the socialist transformation of agriculture which is being carried out by the Communist Party is its technical reconstruction, the radical change of its power base. In the period of socialist transformation of agriculture it was impossible to reconstruct its power base through electrification. In view of the limited power resources at that time such a reconstructi of agriculture would have taken many years and would ha delayed its development. That is why the Communist Par preferred the road of forced supply of agriculture with tractors and motor vehicles. For this purpose it establis in an extremely short time our own motor vehicle and tra tor industry.

Guided by V. I. Lenin's view that technically and econo ically, the most perfect base for the mechanization of agriculture is electropower, the Communist Party took th road to the electrification of agriculture.

Electrification of agriculture was especially rapid in th post-war period. The share of electric power installation in the total power supply to agriculture rose from 0.2% in 1928 to 3.5% in 1955. In 1955 Soviet agriculture had 420,000 electromotors, or 14 times more than in 1941. T share of agriculture in the consumption of electropower i the Soviet Union rose from 0.7% in 1928 to 2.1% in 1955. Agriculture spent in 1955 for production and lighting purposes about 3.5 billion kwh or 100 times more than in 1928. The capacity of rural power stations reached 1.9 million kw in 1955. Yet the present level of agricultural electrification is not yet sufficient to solve the task of rapid improvement of agriculture set by the Party Electrification of kolkhoz production is especially lagging 35% of the collective farms which have power use it only for lighting, and those collective farms which have electr engines use them only a few hours a year. Up to now electrification of agriculture proceeded mainly through c struction by MTS and state farms of their own power stations. Such stations are small and inefficient. The averag capacity of rural power stations was only 46 kw and of hydroelectric stations 70 kw in 1955. The cost per kwh o rural power stations of less than 50 kw capacity was one ruble. It is impossible to carry out electrification of agr culture on a large scale on the basis of such stations because they are unable to supply cheap power. The high c of power in agriculture is delaying the electrification of production processes.

The achievements of Soviet agricultural production and bright perspectives of its development in the next 15 year create the possibility of a radical change in methods of electrification of agriculture. In the future it must develo through connecting rural consumers with the state power grids. According to the available data 82% of the need of agriculture in electropower may be satisfied in thi way.

In the regions which are covered by power grids we ha to include in these grids rural consumers, while in the r gions which are situated outside of the power grids, rura electrification should proceed through the construction o relatively large interdistrict rural power stations by col lective farms on the basis of local power resources. Eighteen per cent of the need of agriculture for power wi be satisfied by such stations.

The level of power production reached in the next 15 years will make it possible to supply agriculture with all the power it needs for complete electrification of all stationary production processes. The consumption of po in agriculture will increase about ten times and will rea 35 to 40 billion kwh a year, while its share in the power consumption of the Soviet Union will increase from 2.4% 5%.

With the development of the power base the level of electrification of city and household needs of the Soviet eople will rise. Consumption of power for this purpose inreased 72.6 times between 1913 and 1955. Between 1926 nd 1955 the number of cities and city-like settlements oubled; their population increased 3.2 times; and their onsumption of power for city and household needs increased 1 times. Per capita consumption of power for these puroses increased in urban areas almost 6.7 times during the ame period. Yet the level of power consumption is lagging ehind demand.

Bringing the annual power production in the Soviet Union o 800 or 900 billion kwh will make it possible, without etriment to the electrification of industry, transport and griculture, to assign 15% of consumption for the electrifiation of city and household services. Compared with its resent level, this would mean an increase of consumption f six to seven times. It will then be possible to start elecrification of processes demanding high temperatures preparation of food) and of those demanding low temperaures (heating and ventilation) and this will mean a transition o a higher stage of household electrification. This will adically transform conditions of life for the Soviet people, vill cut down the expenditure of labor on the preparation of food and on heating and will improve hygienic and sanitary conditions of life. These processes can be most effectively electrified in those urban areas where conditions are especially favorable for the development of power production and which have no natural gas (for example Siberia). In the regions of the European part of the country where the fuel resources for power production are limited and where the advantages of the use of power are lower than in Siberia, the high temperature and the low temperature processes will be electrified only in small and average-size cities where the supply of gas for these purposes is expensive to organize. In the large cities of such regions, where the density of many-storied buildings is high, gas will take the place of electricity in such processes.

An examination of various questions of power consumption dynamics in the next 15 years shows that the electrification of the whole national economy will be raised to a very high level characteristic of the material-production base of communism. Substantial changes will take place in the structure of power consumption which will accelerate qualitative changes in industry, will put an end to the lagging of transport and agriculture and will raise the standard of living of the Soviet people.

P. Serebrennikov:

Problems of Procurement and Processing of Livestock Products

The Communist Party of the Soviet Union has developed a magnificent program for a sharp upsurge in agriculture. This program envisages all-sided aid to socialist agriculture directed toward a further strengthening of the basis of agriculture in production and technology, a reinforcement of agriculture with skilled specialist personnel, and a consistent carrying into life of Leninist principles of material incentives to the collective farms and the collective farmers in the expansion of collective farm production, as well as further democratization of administration in the collective farms. As a result of the measures taken by the Party in all major fields of agriculture, considerable success has been attained. The lag in the development of certain branches has been done away with, and agriculture today is markedly on the rise.

The carrying out of the resolutions of the 1958 Plenum of the Central Committee of the Communist Party of the Soviet Union "Further Development of the Collective Farming System and Reorganization of the Machine and Tractor Stations," and the resolution of the June 1958 Plenum of the Central Committee of the Communist Party of the Soviet Union, "Repeal of Compulsory Deliveries and Payments in Kind for Work Performed by the Machine and Tractor Stations, and a New System of Prices and Conditions for Purchase of Agricultural Products," was a new and important step in the further upsurge of agriculture. The elimination of compulsory deliveries and payment in kind, and the establishment of economically justified prices for agricultural products purchased from the collective farms will create a further material interest on the part of collective farmers and collective farms in increasing the productivity of labor and the output of agricultural products. This upsurge is historically necessary for the purpose of obtaining our objective — the building of communism.

The political, economic, and organizational measures being carried out by our Party in the field of agriculture have led to a sharp upsurge in grain production, which is the foundation of agricultural production as a whole. An important role therein was played by the opening of the virgin and fallow lands, and the swift rise in the plantings of corn. The gross production of grain in the country has risen by 27 per cent in the past four years over the preceding four year period.

Thanks to the successful solution of the grain problem, and the strengthening of the feed base, it has become possible to carry out a rapid development of the most complex department of agriculture — stock raising. From 1955-57 the number of large horned cattle increased by 10 million head, of which five million were cows. There was an increase of 13.6 million head of pigs, and of 17.1 million sheep and goats. Major successes were obtained in recent years in raising the productiveness of stock farming. This is borne witness to by the fact that the increase in the head of large horned cattle, of pigs, sheep, goats, and fowl, was accompanied by an increase in the production of livestock products, and by an overfulfillment of purchase and compulsory delivery plans for livestock, milk, and eggs. For example, the production of meat increased 38 per cent in the last four years, after allowance had been made for increa in the herds. This included an 80 per cent increase in the collective farms and state farms. In 1957, 550,000 tons o livestock were purchased or acquired by compulsory deli ery, or 12 per cent more than 1956. In the Ukrainian Sovi Socialist Republic, the purchase and compulsory delivery of livestock was 27 per cent greater; in Lithuania, 45 per cent greater; and in Moldavia, 69 per cent greater than ir 1956.

Our agriculture has to its credit even greater achieveme in the field of production and compulsory delivery of milk The production of milk has increased by 50 percent in the last four years, while in collective and state farms, it ha more than doubled. As we know, the January 1955 Plenun of the Central Committee of the Communist Party of the Soviet Union resolved to increase the purchase and compu sory delivery of milk and milk products by 1960 to not le than 80 per cent more than in 1954. In 1954, 11.3 million tons of milk were acquired, and in 1957, 20.5 million tons Thus the objective set by the Plenum was attained three years earlier than the date set. In two years of the Sixth Five-Year Plan alone — 1956 and 1957 — acquisition of milk increased by 6.9 million tons, or by almost two million tons more than the increase during the entire Fifth Five-Year Plan. The average annual increase in acquisit of milk in the Fifth Five-Year Plan was one million tons; while in 1956 and 1957, it was 3.5 million tons. In volume of milk production our country virtually overtook the Uni States in 1957. The high rates of development of dairy farming testify to the fact that we will be in a position to catch up to the United States as early as 1958 in producti of milk per head of population.

The production and acquisition of eggs increased very rapidly during these years. Whereas the increase in acqu sition of eggs was 957 million for the entire Fifth Five-Year Plan, in 1957 the increase over 1956 was 989 millic

The plan for acquisition in 1958 is being successfully carried out. During the first half of the current year, the plans for the acquisition of meat and eggs were fulfilled per cent.

All this testifies to the fact that socialist agriculture, cluding stockraising, is very sharply on the upgrade. Th bears witness to the correctness and the triumph of the Leninist line of our Party which has given a decisive reb to the conservatives and dogmatists who lost contact with life, and who opposed the carrying out of such important measures as the opening of the virgin and idle lands, increase in the productivity of livestock raising, and consi tent application of the principle of the collective farmers material self interest in the development of the socialize economy. These data also testify to the fact that the old called theories of ultimate limits, which had long since b driven out of practical life in industry and construction, have today been rebuffed in livestock raising as well. Fo example, in Moldavia in the single year of 1957 there wa a doubling of production not only of ham, but even of beef

The root cause of the enormous triumphs in agricultur is the organizational work of the Communist Party and t

Central Committee. The program for a sharp upsurge in
agriculture developed by the Party has demonstrated the
directions and forms for the solution of this problem with
ultimate clarity. And thanks to the tremendous political and
organizational work of the Party, millions of working
people have been involved in its realization. There can be
no doubt that the sharp upsurge in agriculture, including
ivestock raising, will become even stronger in connection
with the new stage in the development of the collective farm
system and the reorganization of the machine and tractor
stations.

The products of livestock farming — meat, milk, eggs,
and products made thereof — play an exceptionally impor-
tant role in our food intake. In accordance with contempor-
ary scientific data, 60 per cent of the proteins needed by
the human organism should be of animal origin.

In pre-revolutionary Russia the overwhelming majority
of the working people were always in a state of protein hun-
ger, or on the edge thereof. Products of livestock raising
— particularly meat — were, as a rule, inaccessible to the
working people. Their diet was chiefly bread and potatoes.

After the great October Socialist Revolution, fundamental
changes took place in the economy, culture, and material
wellbeing of the working people, including the feeding of the
population. Changes in diet occurred, and are occurring,
chiefly in the direction of improvement in its quality. The
more valuable products are coming to represent an ever
greater proportion of the whole. Of considerable interest
in this respect are data on the sale to the population of
meat and milk products through the state-owned and co-
operative channels of commerce in our country in the years
1932-1957 (1932 equals one hundred).

	1940	1945	1950	1956	1957
Meat products	101	64	119	293	346
Milk and milk products	302	171	285	877	1,107
Butter	269	165	429	869	949

In solving the problem of overtaking the United States in
production per head of population of the most valuable food
products, the selection of meat, milk, and butter as the key
items is by no means incidental. This bears witness to the
act that the Party and the government ascribe great im-
portance to problems of feeding the working people. Con-
cern for the well-being of the people is the supreme law for
he activity of our Party.

The elimination of the neglect of livestock raising, rapid
ncrease in the head of cattle, and increase in productivity
herein, have already had favorable results upon supply of
ivestock products to the population. In 1957, a great deal
more produce and products of various kinds were sold to
he people through state and cooperative stores than in
956. Sale to the population of products of livestock raising
rew with particular rapidity. Thus, for example, meat,
ausages, and other meat products were sold to the popula-
on in a quantity approximately 19 per cent greater in
957 than 1956. Butter sales were 10 per cent higher.
Whole milk products were 27 per cent higher; cheese, 13
er cent higher; eggs, 20 per cent higher. The sale of other
products, sugar, confectionery, tea, fish products, vege-
ables, and potatoes, grew by 5 to 8 per cent.

Consequently, during the most recent years, and in con-
ction with the sharp upsurge in agriculture, there has
en a pronounced improvement in the supply of products
livestock raising to the population. However, bottlenecks
ll exist in the sale of products of livestock farming and
rticularly of meat to the people in a number of districts
of the country in 1957. And the demand for meat and meat products on the part of the population was not completely met. Therefore, the problem of further increase in the production of meat is now one of the most important in agriculture.

The struggle for further increase in production of livestock products in the next two years will doubtless take on even greater scope. During the three or four years just past, starting with the onset of the sharp upsurge in agriculture, much of the effort in livestock farming was given to increasing the total head, and this created, and continues to create, conditions for a considerable increase in acquisition of meat and milk. In this connection the need arises immediately to examine certain problems that will face us in the years just ahead, insofar as processing of large numbers of cattle and quantities of milk are concerned.

The production of meat and milk are very sharply seasonal in character. We know that this seasonal aspect is conditioned by a number of natural circumstances, and this may be the reason why comparatively little attention was given to it, and few steps were taken to reduce seasonal fluctuations. It is only this that can explain the fact that during the past 15-17 years, the seasonal nature of meat production not only failed to decline but actually grew more pronounced, as may be seen from the following data on meat production by government-owned industry. (See Table on next page).

During the first half year of 1940, 405,000 tons of meat was processed, or 32.8 per cent of the annual plan. This bears witness to the fact that, even at that time, the work proceeded unevenly through the year. However, this unevenness became even more pronounced in the subsequent years. True, starting in 1957, we see somewhat of a tendency toward elimination of these seasonal fluctuations. The production of meat during the first half of 1955 was only 20.7 per cent of that for the year as a whole. But in 1957 it rose to 26.5 per cent. There was a corresponding decline in the share of meat production in the second half year, although there was an absolute increase in production for the year as a whole.

We know that non-rhythmical functioning even of individual enterprises always has been, and remains, a cause of tension and a major shortcoming of ours. Yet here we are faced with irregular functioning of an entire branch of production. In view of the seasonal manner in which the meat packing industry operates, capacities on which large capital investments were made are utilized poorly. For example, in the fourth quarter of 1956, 1,121,000 tons of meat were processed (47.3 per cent of the annual Plan). Approximately the same amount of meat might have been processed for the first quarter of 1957. In fact, however, only 328,000 tons of meat were processed, which is less than a third as much as in the fourth quarter of 1956. If the amount of meat processed in the fourth quarter of 1956 be taken as a hundred, productive capacities were employed in 1957 as follows:

29 per cent in the first quarter
36 per cent in the second quarter and
77 per cent in the third quarter

In the fourth quarter, the packing industry witnesses a race to catch up, lengthened shifts, work without days off, and large losses of raw stock. In the first quarter, on the other hand, production is cut down considerably, and this results in failure to employ capacities, and in turnover of personnel.

Many enterprises in the packing industry show a year round utilization of their capacities to a total of 45-50 per cent. However, large capital investments are made in this industry annually to make it possible to process cattle during the period when the largest numbers are delivered in

	1940		1955		1956		1957	
	Thousand tons	%	Thousand tons	%	Thousand tons	%	Thousand tons	%
Full Year	1,234	100.0	2,228	100.0	2,373	100.0	2,757	100.0
Including:								
First Quarter	237	19.2	230	10.3	254	10.7	328	11.9
Second Quarter	168	13.6	232	10.4	297	12.5	403	14.6
First Half Year	405	32.8	462	20.7	551	23.2	731	26.5
Third Quarter	297	24.1	607	27.3	701	29.5	864	31.3
Fourth Quarter	532	43.1	1,159	52.0	1,121	47.3	1,162	42.2
Second Half Year	829	67.2	1,766	79.3	1,822	76.8	2,026	73.5

accordance with compulsory deliveries (the fourth quarter). If packing plants were provided with raw material to work with to full capacity throughout the year, and if shipments arrived evenly during the year, this would make it possible to free these capital investments for other needs of the national economy.

The seasonal problem in industry has a negative effect on consumption as well. If the conditions of labor do not change, the requirements of the human organism for foodstuffs undergo very insignificant variations in the course of the year. However, meat supply for the population reaches the stores very unevenly. This lack of uniformity makes it necessary to build up huge reserves of meat at the beginning of the year, but even this is capable only partially of smoothing over the sharp reduction in deliveries of meat during the first and second quarters. In 1957, for example, deliveries of meat to market were as follows: 20.2 per cent in the first quarter; 17.3 per cent in the second; 25.5 per cent in the third; and 37 per cent in the fourth. As a rule the maximum volume of government trade in meat occurs during the fourth quarter, or, in other words, during the time when the greatest amount of meat, fowl, vegetables, potatoes, and other products reach the collective farm market as well. During the first and second quarters, when the arrival of products at the collective farm markets declines, industry produces the smallest amount of meat; and there is comparatively little of it in the government-owned stores as well.

In the next five to seven years meat production will more than double. There can be no doubt that the people engaged in agriculture will amend this figure in the same directions as they amended the figures in the past few years insofar as milk production is concerned. During the same period milk production will more than double. It may be stated without exaggeration that in the processing of these colossal quantities of meat and milk, seasonal fluctuations in production, if they are not combatted, would not only result in major losses of these products to the national economy, but would also retard the development of stockraising.

There are those who believe that the seasonal fluctuations will disappear as meat and milk resources increase. It is impossible to agree with this reasoning. For example, industrial production of meat in 1957 rose to 2,750,000 tons as compared to 1,234,000 in 1940. The increase in meat resources during this period by more than 100 per cent not only failed to attenuate the seasonal nature of work in the packing industry but only rendered it more acute. From this it follows that it would be incorrect to explain the seasonal nature of operations in the packing industry by the state of the resources of supply.

As the meat resources increase, conditions for modifying seasonal fluctuations may develop to some degree. Bu this would occur not at the level of production, but of consumption, by the accumulation of large supplies of meat for the period when the smallest deliveries are made from the collective and the state farms. However, this solution is permissible only as a temporary and forced one, as it will cause the product concerned to become more expensive in view of the fact that excessive refrigerator capaci will be required to store large quantities of meat for sale in the interim between seasons. It is therefore necessary even today to seek means for eliminating seasonal fluctuations in the packing industry. It is now, when the Union Republics, the economic councils, and the enterprises are elaborating their long-term plans for 1959-1965, that mea ures have to be provided to liquidate seasonal fluctuations in the packing and dairy industries, or at least to modify this to the greatest possible degree.

What are the causes of seasonal fluctuations in the packing and dairy industries?

The most important reason is that thus far the required coordination between the industry and its source of supply is entirely lacking. The packing and dairy industries have increased their capacities from year to year, and were equipped with modern equipment, while their source of supply, stockraising, lagged behind. Under these conditio the raw materials for these industries — livestock and milk — were delivered unevenly.

The unsatisfactory situation as far as feed is concerned and, in a number of cases, the inadequate housing for cattle, made it necessary for many state farms and collective farms to cut down their head to the greatest possible degree in the fall, and particularly before winter conditions set in. Therefore, cattle purchase was carried out chiefly during the second half of the year, and particularl in the fourth quarter. This is testified to by the following data on purchase and delivery of meat on the hoof, including feed-lot gain in weight (see Table on next page). As m be seen from the table, the deliveries of livestock during the past three years show what is as yet a small but neve theless clearly defined decline in seasonal fluctuation. Thus, only 23.2 per cent of annual acquisitions of livestoc were made during the first half of 1955; but in 1957, 30.5 per cent were made during that period. The percentage o acquisitions during the third and fourth quarters was almost identical in 1957. These shifts toward greater uniformity in acquisitions are to be explained in part by the fact that the share of pigs in the total deliveries increase noticeably (pigs are delivered more uniformly throughou the year than other types of livestock). There has also b an improvement in the feed situation for livestock, and to many collective farms feed their stock into slaughterhous

	1955		1956		1957		1958	
	Thousand tons	%	Thousand tons	%	Thousand tons	%	Thousand tons	%
Annual Total	4,008	100.0	4,374	100.0	4,969	100.0	5,310	100.0
Including:								
First Quarter	330	8.2	349	8.0	508	10.2	606	11.4
Second Quarter	599	15.0	779	17.8	1,010	20.3	1,086	20.5
First Half Year	929	23.2	1,128	25.8	1,518	30.5	1,692	31.9
Third Quarter	1,156	28.8	1,357	31.0	1,713	34.5	1,812	34.1
Fourth Quarter	1,923	48.0	1,889	43.2	1,738	35.0	1,806	34.0
Second Half Year	3,079	76.8	3,246	74.2	3,451	69.5	3,618	68.1

ondition. And this has a positive effect on the uniformity f acquisition. However, there is still a very pronounced nevenness in acquisition of livestock. This unevenness im- airs not only the work of the industry, but the work of the tate farms and the collective farms, as the deliveries dur- ng the second half of the year include not only stock that as been fed up during the summer, or that it has been de- ided to get rid of by the end of the given year, but a consider- ble amount of young stock as well. For example, the state arms of the Ukrainian Soviet Socialist Republic delivered 7,000 calves under one year of age, with an average weight n the hoof of only 112 kilograms; and more than 60,000 ead of young beeves over 18 months of age, with an average eight on the hoof of 227 kilograms, in 1956. The state arms of the Russian Federation delivered nearly 157,000 alves of an average weight of 107 kilograms to the laughterhouses. Yet if normal conditions for feeding and aintenance of cattle were created, young cattle should eigh 310-320 kilograms by the time they are 18 months old.

Another shortcoming in acquisitions is the fact that the lly grown stock delivered at an inadequate level of feeding s still quite considerable. The Moscow Packing House omplex processed 125,000 head of cattle in 1957 that were elow optimum condition, the average weight per head being 95-200 kilograms. Poorly fed cattle processed in the Mos- ow and Leningrad packing plants came chiefly from elorussia, the Chuvash ASSR, and from Voronezh, Volog- a, Kirov, and Orel oblasts. An improvement in the feed upply would create conditions for continuous year-round aising and fattening of cattle, including young cattle, and r bringing it to normal conditions for the slaughterhouse. his would provide considerable additional supplies of meat. he result would be that raw material for the packing in- stry would be delivered more uniformly, and this is the ost important consideration for elimination of seasonal evenness in meat production.

Fulfillment of the resolutions of the June 1958 Plenum of e Central Committee of the Communist Party of the Soviet nion will play an enormous role in bringing about a new psurge in stockraising and in reducing the seasonal nature meat production.

Under the new procedure, the calendar dates and quarter- plans for government acquisition of livestock products ill now be subject to the approval of the cabinets of the nion Republics. Thus, the raw material supply for the cking house and dairy industry, and the plan of meat and ilk production, will now be more closely coordinated in e localities, and this will also facilitate reduction in asonal fluctuation in the work of the dairy and packing- use industries.

The dairy industry is just as subject to seasonal fluctuations. As a rule, a pronounced shortage in dairy products is felt during the fall and winter, while there is an abundance in the spring and summer. This is explained by the fact that up to 70 per cent of the milk is now produced during the pasturage period in agriculture. There is no question that this is the best time for calving and high milk yields. However, under these conditions, the dairy industry operates at very considerably less than capacity for six or seven months of the year.

A system of year-round calving has been introduced in some collective and state farms to improve production of milk during the non-pasture period. For example, many state farms in the Belorussian SSR have successfully introduced uniform calving of cows every month in the year, with the result that these enterprises produce milk uniformly throughout the year, and deliver it to the government accordingly. The Red Star State Farm of Kletsk raion of this Republic witnesses 23-29 per cent of the annual calvings during each quarter. Year round calving is of particular importance in the state and collective farms of the whole milk zone. This measure makes it possible for many towns and industrial centers to receive whole milk the year round. When calving is organized to take place the year round, the labor force and the means of transportation are employed uniformly and more productively throughout the year, and the need for milk cans is reduced, thus cutting the cost of milk. It is understood that in order for this measure to be realized, the state and collective farms must have adequate supplies of good feed for the winter, and also possess satisfactory quarters.

A most important factor in modifying seasonal fluctuation in milk product consumption is an increase in the production of powdered milk. Today, very little powdered milk is produced in our country. Only 0.5 per cent of all the milk acquired goes to its production. In view of defects in the procedure for the production of powdered milk, and its release to the public in inadequately sealed packaging, powdered milk does not dissolve completely when reconstituted, and this product therefore is not as yet in high demand among the population. The industry must considerably increase the processing of dry milk and must bring about a sharp improvement in its quality in the briefest possible time.

The unevenness in supply of milk for the population can be modified by producing pasteurized milk. For example, in the Netherlands, more than 30 per cent of all the milk on the market is pasteurized; in the German Federal Republic, as much as 15 per cent; in England, over 10 per cent, etc. In the United States the pasteurization of milk has been practiced for many years. In recent years, it has proved possible to develop the pasteurization process in such fashion as not to impair the food or taste properties of milk. It is necessary to organize the production of pasteurized milk as rapidly as possible, and to provide for the building of plants to produce this valuable and readily stored product.

Also of considerable importance is the development of the refrigeration industry. Before the revolution Russia had altogether 45,000 tons of refrigeration capacity; while today there is more than 1,300,000 tons (not counting refrigerators in the retail stores or household refrigerators). The shortage of refrigerator capacity is something that we are still keenly aware of, and the need for refrigerators will be increased to an even greater degree as the production of meat and milk increases. This must also be taken into consideration in compiling the long-range plans for the development of the national economies of the constitutent republics.

The June 1958 Plenum of the Central Committee of the Communist Party took note of serious shortcomings in the acquisition of agricultural products, and also in the transportation and processing thereof. Annual losses of meat come to 25-30,000 tons in the driving of cattle to market and transportation alone. The major reason for these losses is poor management and poor preparation for the season of large-scale delivery of cattle to purchase points. To this day, normal conditions have not by any means been established along all cattle drive routes, or in the transportation of cattle by railway. As a rule, the specified procedures for feeding and watering the cattle are violated, and this results in loss of weight and fat.

It should be observed that the exceedingly backward transportation technic also contributes to loss in live weight and feed condition. In the most advanced capitalist countries, cattle are transported at the rate of 700-800 kilometers a day. However, the Railway Ministry provides for transportation of cattle at a rate of 320 kilometers a day, and in actuality the average annual rate of transportation of animals by rail is not even 100 kilometers. Moreover, railroads have virtually no special cars for cattle transport. Cattle are transported in poorly modified box cars, and even the modification of the cars is usually done on a handicraft basis. Most stations do not have loading runways or installed watering troughs. Nor does specially equipped truck transportation for cattle and fowl exist, for all practical purposes. However, the fact is that it is much faster and cheaper to move cattle by truck than by cattle drives.

As the production of meat increases, there will be an increase in the transportation of cattle as well. Therefore it is necessary to improve the manner in which such transportation is conducted. A long range plan should envisage measures the realization of which would result in elimination of losses of weight and feed condition by cattle. It is also important to organize special railway and truck transport to carry livestock.

Considerable losses of meat also occur during the period when cattle are kept at the packinghouse stockyards before slaughter. Under these conditions the excuse often given is a lack of capital investments, or inadequate capacity. However, these "objective conditions" not infrequently conceal poor organization of the work or even outright irresponsibility in management. For example, why are special capital investments needed to provide simple structures to deliver water and feed to cattle? Yet the fact is that these simple devices are lacking even at many of the largest and best equipped packinghouses. On the other hand, losses at the packinghouses are often due to violations of agreed schedules for the shipping of stock fed for market. For example in 1957, certain economic councils (Ulyanovsk, Chuvash, etc.) did not provide for normal housing and maintenance of stock ready for market, and therefore sought to get ri of them as rapidly as possible, thus shipping cattle to the packinghouses outside of the planned quotas, over and abo all schedules, and in violation of the agreed schedule. As a result, such an enormous number of cattle piled up in t stockyards of the packinghouses that it was impossible fo these packinghouses to process them, and considerable losses resulted.

Also requiring special examination are problems of assortment and manner of packing of livestock products, an also the organization of a specialized system of outlets fo the sale of meat and milk products. If these problems ar not all solved at the present time, this may result in the development of bottlenecks in the future, or even of dispr portions in certain branches of the national economy in connection with the enormous increase in production of livestock products.

Among the measures elaborated and being carried out the Party, an important place is to be given to the new pr cedure for providing the population with livestock produc

Prior to 1957, the supplies of meat, dairy products, an eggs for the markets in the various Republics, krais, and oblasts, were approved by the central government. In determining the size of these supplies, the basis usually taken was the dynamics of the statistics for the precedin years, and the addition of a definite level of increase ther to. However, the level of production, the situation as regarded purchases and acquisitions, and the degree of util zation of local possibilities for the development of agricu ture were given inadequate weight. Improvement in the supply of livestock products to the population depended, t a considerable degree, upon the ability to obtain funds fo these products from the central government. In a numbe of cases, local agencies bent their efforts to "justifying" need to obtain the largest possible market supplies from the central authorities, rather than to increasing production of livestock products on the spot. For example, until the new procedure was introduced, Kuibyshev oblast, whi had every possibility of completely supplying the needs o the population for meat products out of its own productio satisfied little more than half of its own needs and obtaine obtained the rest from other krais and oblasts. There we also situations in which various krais and oblasts, which had done an unsatisfactory job of developing agriculture, and had not carried out their plans for the acquisition an purchase of livestock, milk, and eggs, obtained more of these products to supply the population from government stocks than did krais and oblasts that had successfully m the requirements of the plan.

Due to the inadequate supplies of meat, milk, and eggs centralized distribution thereof was necessary at the end of the great patriotic war. But when agriculture underwe a sharp economic upturn, the centralized form of distribution of these products became outdated and a hindranc to the unleashing of initiative and the expansion of produc tion, as it failed to create material interest in seeking o further possibilities for increasing the production of meat, milk, and eggs, and reduced the responsibility of local organizations in the supply of these products to the population. The January 1955 Plenum of the Central Con mittee of the Communist Party of the Soviet Union pointe to the need to establish a system of supplying the population with these products that would combine the principle of centralization with greater independence on the part o the Union Republics, the krais and oblasts. Supply of liv stock products to the population was made dependent upo the level of production, acquisition, and purchase of these products, so that distribution became a factor favoring a sharp upsurge in livestock farming.

To satisfy the needs of the USSR as a whole (for foreign trade, maintenance of government reserves, assistance in the form of subsidies to regions incapable for economic or natural reasons of meeting their own needs for livestock products, etc.), the Union Republics contribute to a USSR-wide supply, after which they expend the products of stock-raising as they see fit. The market supplies of meat, milk, and eggs are now determined not in the national capital but in the Republics, krais, and oblasts. And the conditions for better supply of livestock products to the population today depend upon the maximum utilization of local possibilities to develop livestock raising.

The new situation has created vast material stimuli for increasing the output of meat, milk, and eggs, and for improving supply to the population. Those Union Republics that had rapidly grasped the advantage of the new system of supply, and had reorganized their work, scored outstanding results within the very first year. For example in the Moldavian Soviet Socialist Republic, market supplies in 1957 increased 96.3 per cent over 1956 as regards meat products, 83 per cent in eggs, and 22 per cent in dairy products. This Republic completely satisfied the demands of its population for meat, meat products, milk, and dairy products. Sales in the Lithuanian Republic in 1957 were greater than in 1956 by the following figures: 74 per cent for meat, 39 per cent for milk, 94 per cent for eggs. The Belorussian Republic increased market supplies of meat products by 103 per cent in a single year, and of milk products by 72 per cent. Good results in increasing market supplies in 1957 were obtained also by the Ukraine, Latvia, Estonia, and some krais and oblasts of the RSFSR.

It should be observed, however, that not all republics, krais, and oblasts have correctly understood the new procedure for supply of livestock products to the population. Some krais and oblasts still sent telegrams to the national capital in 1957 with orders for products that could have been produced on the spot. There were some republics, krais, and oblasts which, in 1957, produced and delivered to the government less meat than in 1956. (For example, the Kazakh Republic, as well as 28 krais and oblasts of the RSFSR.) Only eight oblasts in the RSFSR fulfilled the plan for weight gain by feeding and fattening cattle.

Despite the fact that delivery of livestock products should give first priority to the needs of the USSR as a whole, regardless of what has been happening in purchase and other forms of acquisition, the RSFSR, the Kazakh SSR, and the Kirgiz SSR, have nevertheless not fulfilled the plan for delivery of meat products to the USSR-wide supply.

Some krais and oblasts have grossly violated the established principle of dependence of supply upon level of production, and without having fulfilled the plan for purchase and other acquisition of cattle have nevertheless distributed more meat products for local consumption than the plan provided. For example, the Vologda oblast only carried out 83 per cent of the plan for purchase and acquisition in 1957, but expended meat products for local supply to the degree of 107 per cent of the plan. The same situation exists in Orenburg and Novosibirsk oblasts in Altai krai and elsewhere.

Excessive distribution of meat products to meet local needs was accomplished by them at the expense of failure to fulfill the plan for delivery of livestock products to the USSR-wide fund. As we see, there are personnel in these krais and oblasts who place local interests above those of the country as a whole.

It is also necessary to call attention to some other intolerable cases of localism. For example, there are enterprises in the Kurgan oblast, chief among them the Kurgan packing house, which shipped over 3,000 tons of meat products less than it was supposed to for USSR-wide and Republic-wide needs, while distributing large quantities of meat products in the locality without permission or orders to do so. In Tambov and Omsk oblasts, in Krasnodarsk krai and elsewhere, the bulk of the ham output was shipped outside the limits of this krai and oblast respectively, while beef and mutton was reserved for local supply.

For a number of reasons, including in part the specialized nature of their agriculture, some union republics are not in a position to satisfy the requirements of the population for livestock products out of their own production. Such republics are assisted in the form of subsidies and additions to their own supplies from the USSR-wide supply stocks. However, some of these republics have attempted to obtain excessive subsidies, and have not increased their own production. Thus, in Georgia, Armenia, and Azerbaidzhan, purchase and acquisition of cattle in 1957 was at an unjustifiably low level, lower even than in 1956.

Elimination of these shortcomings will make possible an even greater increase in production of livestock products. The new procedure for supply of livestock products to the population, which makes possible a sharp upsurge in this important branch of agriculture, and consequently its consumption by the people, is called upon to play a very great role in this respect.

L. Leontyev:

State Monopoly Capitalism and the Struggle for Socialism

In the present epoch, when the transition from capitalism to socialism, a significant event in human history, is being completed, and when the attractive force of socialist ideas has become a decisive factor in the ideological life of mankind, the struggle between two opposing ideologies — the capitalist and the socialist — is concentrated around the question of the need to replace the outlived capitalist system by a new and higher socialist system. Under these conditions, bourgeois ideologists who pose as their fundamental objective the defence of capitalism and defamation of the achievements of the world system of socialism encounter ever-increasing difficulties. The hopelessness of the tactic of frontal attacks compels the apologists of capitalism to resort to outflanking maneuvers, employing revisionism, which is of inestimable assistance to them.

The chief feature of revisionism consists of the fact that it speaks from "socialist" positions, under the mask of defense of the working class and of the laboring population as a whole. It denigrates the new system in the lands of the socialist camp and paints the capitalist system in rosy hues. The modern revisionists attempt to present state monopoly capitalism as a new economic structure beyond and above capitalism. They interpret the capitalist state as a force above classes, which allegedly provides for the general welfare and liberates economic life from the destructive effects of the elemental laws of capitalism. All their theories pursue a specific objective: to distract the working class of the capitalist countries from the struggle for socialism.

The program of the Union of Communists of Yugoslavia asserts that:

"The rising wave of state capitalist tendencies in the capitalist world is the most obvious proof of the fact that mankind is entering the era of socialism, irresistibly and by the most varied paths. It is entering an era in which socialism becomes, to an ever-greater degree, the content and method of the daily life of all mankind." Further it is stated in this program that:

"Mankind, with all its economic and other social relationships, is proceeding, by the most various paths, into a period of transformation in the direction of socialism."

In the program of the Union of Communist of Yugoslavia, state monopoly capitalism is described as "an accumulation of socialist phenomena." The program also speaks of "elements" of socialism, of "socialist tendencies," which are allegedly in operation in the system of state monopoly capitalism. The presence of these "elements" and "tendencies" is confirmed by the assertion that the working class allegedly "has really in most countries (they are speaking of capitalist countries — L. L.) already become a social and political factor actually exercizing a significant influence upon social development and the contemporary policies of the ruling elements."

Thus, the idea is put forth that the growth of state monopoly capitalism is capable, in and of itself, without a socialist revolution, without the conquest of political power by the working class, of attaining the victory of socialism. In conjunction with the theory that the modern capitalist state is over and above classes, this evaluation of the perspectives of the transition to socialism consists of nothing more than a new version of the long-exposed reformist theory of "peaceful conversion of capitalism to socialism.

The program of the Union of Communists of Yugoslavia contains the qualification that:

"There is no such thing as an automatic transition from state capitalism to socialism." However, this qualificatio is entirely acceptable even to the reformist leaders of the right-wing socialist parties, who make speeches about the need for a definite effort to be put forth for this transition from capitalism to socialism, on the basis of the existing capitalist economic system and within the framework of th capitalist state. However, the program of the Union of Communists of Yugoslavia does not speak of the need to make a distinction between the objective and subjective pr requisites for socialism now existing in the capitalist cou tries and the actual transition to a socialist transformatio of society, which requires a revolutionary transfer of pow from the capitalist class to the working class.

The program of the Union of Communists of Yugoslavia bypasses the most important thing, which is that the existence of material prerequisites for socialism is entirely insufficient for the socialist transformation of society, an that this transformation is capable of realization only as result of a successful revolutionary struggle on the part c the working class, led by a Marxist-Leninist party. Without reference to the main requirement for transition to socialism, the authors of the program of the Union of Con munists of Yugoslavia assert that:

"We live in the period of disappearance of the capitalis social system, and the birth of a socialist social system.

However, Marxism-Leninism teaches a completely different approach to state monopoly capitalism from the viewpoint of the struggle of the working class for socialis State monopoly capitalism, being the outcome of the most acute contradictions of capitalism in its monopolist state development, does not do away with these contradictions, but merely represents the form in which their motion proceeds. This pertains primarily to the basic contradiction of capitalism, that between the social character of production and the private capitalist form of appropriation of the results of production.

Long ago Engels wrote prophetically that the growth of the forces of production of modern society would inevitab take them beyond the narrow limits of capitalist private property, and this would lead primarily to such a form of capitalist collectivization of great masses of means of production as the joint stock company. Further development would make this form inadequate, at which time "the government as the official representative of capitalist society woul be compelled to take control over production upon itself."

The appearance and development of state monopoly capitalism does not destroy the basic contradiction of capitalism, but only serves to exacerbate it further. The increase in the social nature of production comes increasingly into conflict with the narrow bounds of capitalist property.

The growth of state monopoly capitalism leads to an increase in the scope of the power of the largest monopolies. At the same time, the competitive struggle between individual groups of monopoly capital for the most profitable posts in the government apparatus, and for profitable government orders, and for influence upon the economic policy of the bourgeois state and its agencies becomes ever more acute. It is this which provides the soil for the constant changes in the relationship of forces among financial groups and which results in intensifying the unevenness of development of the greatest monopolies.

As a result of the increasing influence of monopolies upon the government apparatus, the contradiction between the monopolies and the non-cartelized enterprises becomes ever more acute.

The deeply contradictory nature of state monopoly capitalism becomes particularly clear along the main front of the class struggle in bourgeois society; in the relationships between labor and capital. While the apologists of the capitalist class and their reformist and revisionist echoes praise the economic activity of the capitalist state as the factor allegedly promoting harmony of class interests, the leading monopolist groups become enabled, as state monopoly capital increases, to acquire new means of oppressing and enslaving the working class. In addition to the utilization of the entire force of the government apparatus as a direct weapon of compulsion against the working class, the monopolists employ numerous levers for bringing pressure to bear upon the economic position of the working people for their own selfish interests: taxes, price policy, labor legislation, social insurance, etc.

The historical experience of the development of state monopoly capitalism completely confirms the Marxist conception to the effect that:

"The development of the contradictions of a given historical form of production is the only historical means toward its destruction and the formation of a new one."(2) Engels noted that as a considerable proportion of the productive forces becomes the property of the capitalist state, capitalist relationships are not done away with but, on the contrary, are carried to their extreme and to their highest level.

"But at this high point, a turn occurs. State property in the productive forces does not resolve conflict, but contains the formal means and possibility of its solution."(3)

Lenin exposed the reactionary nature of monopoly capitalism which constitutes a barrier to the further development of human society. At the same time he stated:

"No Marxist will forget that capitalism is progressive compared with feudalism, and imperialism is, as compared to pre-monopoly capitalism. This means that we would not be justified in supporting every struggle against imperialism. The struggle of reactionary classes against imperialism we do not support. And uprisings of reactionary classes against imperialism and capitalism do not receive our support."(4)

The progressive nature of capitalism as compared to the preceding forms of exploitative society lies in the fact that in the course of its development capitalism prepared the material prerequisites for the socialist transformation of society and for the socialist proletarian revolution. Capitalism has long since become sufficiently mature and overmature for socialist revolution. Therefore, it is impossible for modern monopoly capitalism to return to the previous capitalism with the rule of free competition. There is only one path that can be followed — the revolutionary path to socialism.

Lenin warned against drawing incorrect solutions about the progressive nature of the latest phase of capitalism as compared to its earlier phase. He drew attention to the Struvists and the "economists" of the 90's of the nineteenth century who drew from the progressivism of capitalism, and the inevitability of the triumph of capitalism in Russia, apologetic conclusions in the spirit of subservience to capitalism, and making their peace with it; addressing words of praise to it, and making apologetic conclusions in the nature of denying the importance of political struggle, etc.

"There are signs," wrote Lenin in 1915, "that even today the undeniable fact that capitalism is progressive when compared with the semi-middleclass 'heaven' of free competition, the inevitability of imperialism, and the final triumph thereof within the advanced countries of the world over 'peaceful' capitalism, is capable of leading to an equally large number and variety of political and apologetic errors and false conclusions."(5)

This warning by Lenin is most appropriate even today. Is it not true that these modern revisionists are following the path of the "Struvists" and "economists" of the end of the last century? Aren't they making the same apologetic conclusion in speaking of the progressive nature of capitalism in a spirit of worship for and conciliation with it and denying the need for struggle against capitalism?

In the resolution of the Seventh April All-Party Conference of 1917 written by Lenin, a concise characterization is given of the situation arising from the First World War. The resolution notes that the objective prerequisites for socialist revolution, which were doubtless present prior to the war in the most advanced capitalist countries, began to mature at a spectacular rate as a result of the war. This situation is illustrated by citing such facts as the acceleration of the process of the squeezing out of and the bankruptcy of small and medium sized enterprises, a gigantic increase in the concentration and internationalization of capital, conversion of monopoly capitalism into state monopoly capitalism, introduction of regulation of production and distribution in a number of countries as a result of the pressure of circumstances; and also the adoption of nationwide labor service in a number of countries. Further, the resolution notes that if private ownership of the means of production is retained, all these steps toward higher monopolization and a greater role of the state in production will inevitably lead to an incredible expansion in the profits of the great capitalists at the expense of the remaining sections of the population and to condemning the working people for many decades to pay tribute to the capitalists in the form of billions as interest on loans.

But these same conditions, the resolution states further, would, with elimination of the private ownership of the means of production, and transfer of the power of the state completely into the hands of the industrial working class, constitute an assurance of the success of such a transformation of society, which would eliminate exploitation of man by man and assure the well-being of each and every person.(6)

Lenin emphasized that the deeply contradictory nature of state monopoly capitalism must never be permitted to excapte one's vision. State monopoly capitalism is a further step in the socialization of production. This higher step in the socialization of production is carried out under capitalism and under the conditions of dominance of private property in the means of production. At the same time, as long as power is in the hands of the capitalist class, state capitalism does not at all signify "socialism," or "virtual socialism." Lenin noted that no matter how great the socialization of production would be under state monopoly capitalism, its development in no way changes the nature of capitalist relationships, but only creates objective prerequisites for transition to socialism. However, the prerequisites may be employed for transition to socialism only under the condition that the working class overthrows the rule of the capitalists, wins government power for itself, and establishes a dictatorship by the working class which would provide the foundation for a new socialist economic system.

As distinct from capitalist relationships of production which come into being in elemental fashion and develop within the depths of feudal society itself, socialist relationships of production cannot arise and develop within the framework of capitalism. Marxist-Leninists decisively reject reformist illusions as to the possibility of a gradual, spontaneous transformation of capitalist relationships of production into socialist relationships, and the possibility of a "evolutionary" transformation of capitalism into socialism.

Lenin wrote that:

"Capitalism creates its own gravedigger; creates the elements of a new society itself. But, at the same time, these separate phenomena change nothing in the situation of things, and do not affect the domination by capital without a 'leap'."(7)

In his famous work State and Revolution, Lenin cites an exceptionally important concept of Engels, indicating how attentively and thoughtfully Engels followed the specific changes in form of modern capitalism, and how he was able therefore to some degree to anticipate the problems of the epoch of imperialism. We are speaking of the criticism that Engels in 1891 brought to bear upon the draft of the Erfurt program of German social democracy. Engels quoted one of the formulations of this draft, to wit: "The absence of planning that lies rooted in the essence of private capitalist production..." and noted that this formulation needs considerable correction, inasmuch as capitalist production is no more than a given social form, an economic phase, and private capitalist production is merely a phenomenon existing in one or another degree within this phase. Private capitalist production (that is, production conducted by private capitalists) becomes an exception to an ever greater degree.

"Capitalist production conducted by shareholding companies," Engels continued, "is not at all private production, but production in the interests of a number of persons in combination. If we now turn our attention from shareholding companies to trusts, which subject to themselves and monopolize entire branches of industry, here we see a cessation not only of private production, but also of the absence of planlessness."

Engels proposed in connection therewith to strike the word "private" from the formulation cited in the Draft Program.(8)

Lenin adduced the basic idea of Engels on the trusts, and noting that here a most fundamental element had been introduced into the theoretical evaluation of ultramodern capitalism, that is, imperialism, to wit. that capitalism is undergoing conversion into a monopoly capitalism, he made the following observation:

"This last must be emphasized, as the most widespread error is the bourgeois reformist assertion that monopolist or state monopolist capitalism is capitalism no longer, but may be termed 'state socialism,' or something of the sort."(9)

Lenin noted that the trusts did not provide overall planning, did not and could not — and that no matter what measures the monopolies might take to regulate the economy:

"We are still under capitalism, although in a new stage thereof — but indubitably under capitalism."

Decisively rejecting reformist illusions about "state socialism," Lenin wrote:

"The 'closeness' of this kind of capitalism to socialism must be for real representatives of the industrial working class a proof of the closeness, the ease, the realizability, and the urgency of socialist revolution; but by no means a reason for being patient with those who deny this revolution, and who pretty up capitalism — as all reformists ar attempting to do."(10)

The idea that the development of state monopoly capitalism testifies to the extreme closeness and realizability o socialism, the total urgency of socialist revolution, was one that Lenin expressed repeatedly. In the period of immediate preparation for the Great October Socialist Revol tion, Lenin wrote in another work:

"The dialectics of history are specifically such that wa which provides unusual acceleration for the transformati of monopoly capitalism into state monopoly capitalism, thereby brings mankind towards socialism with unusual rapidity."

In this connection, Lenin emphasized that "State monop capitalism is the most complete and material preparation for socialism, is its threshold, is that step on the ladder history between which and the step called socialism there are no intermediate steps."(11)

More than four decades have passed since these deathle lines of Lenin were written. Much has changed in the wor and enormous changes have occurred in the economics of capitalism. Life has completely confirmed Lenin's analysis of modern capitalism as the threshold of socialism.

In some countries, the true representatives of the industrial working class, the Marxist-Leninist parties, have drawn the only correct conclusion with regard to the "clo ness" of such capitalism to socialism: the conclusion that socialist revolution is near and urgent. Socialist revoluti triumphed first in Russia and then in a number of other countries of Europe and Asia. Today, a world socialist sy tem exists and is undergoing successful development. An this system exercises tremendous influence upon the enti course of world history.

In other countries, the reformists, who occupy themsel with a negation of the socialist revolution, and a prettying up of capitalism, have saved the capitalist system from t deathly danger that threatens it. In these countries, inclu ing those where right-wing socialist parties held power f long periods, the reformist leaders in control of things made no fundamental changes in the capitalist method of production. The means of production remain in the hands the capitalists as before, and the working class continues t be subject to exploitation as before. And no reformist fa about "people's capitalism," and "a mixed economy," no revisionist imaginings as to the presence of "elements of s cialism," and "the income revolution," are capable of con cealing the truth that the exploitative nature of modern capitalism has not changed in the slightest.

Even under the conditions of the pre-monopoly stage o capitalism, Engels drew a distinction between the two typ of governmentalization of the productive forces. On the o hand, in a number of cases, the means of production or communication actually outgrow the narrow framework o private capitalist property, even in the form of sharehold companies, and their governmentalization becomes an ec nomic inevitability and a progressive act. On the other hand, there are specific circumstances under which the bourgeois state takes enterprises or branches of industry into their own hands for political or financial reasons. As an example, Engels cited Bismark's nationalization of the Prussian railway lines for political and strategical reasons and the establishment of government tobacco monopolies in a number of capitalist countries to fill out the income of the government.

Only the first type of nationalization, but not at all the second, was regarded by Engels as "economic progress, a new step along the path whereon society itself will take all the productive forces into its own hands."(12)

In this connection, he gave particular emphasis to the fact that transformation into government property, as well as transfer into the hands of shareholding companies and trusts, while demonstrating not only the inability of the capitalist class further to administer the forces of production, but even the fact that this class is not needed for this purpose, does not, however, do away with the capitalist nature of the productive forces. While noting the objectively progressive nature of the first type of nationalization, Engels, at the same time, decisively exposed all efforts to depict any capitalist nationalization of the productive forces as "elements of socialism." Thus in one of his letters he notes:

"This is a purely selfish Manchester capitalist falsification, to designate as 'socialism' each and every interference by the government in free competition: protective tariffs, guilds, tobacco monopoly, nationalization of particular branches of industry, the Prussian state bank, the royal porcelain factory. We must subject this to criticism, and not accept it on faith."(13)

In the monopoly stage of capitalism, this difference between the two types of government interference in economic life is reproduced on a new basis, and on an even more sharply expressed form. Although, in practice, measures of the two types are often intertwined with each other. That range of phenomena of state monopoly capitalism bears, as do all forms of militarization of the economy, a clearly defined anti-popular and arch reactionary character. It not only does not meet the pressing needs of progressive development of the forces of production, but on the contrary, is bound up with the preparations for war, and bears an enormous threat to the most vital interests of society. The parasitism and rotting of modern capitalism are particularly clear in such measures. The increase in military expenditures, and the heightened arms race of the imperialist powers, are decisively condemned by all progressive forces in society.

Marxist-Leninists always proceed from an unconditional and unqualified recognition of the class nature of the capitalist state. But at the same time, they have never taken a nihilist position with regard to government — which is, for example, characteristic of the anarchists who deny the need for political struggle on the part of the working class. Marx wrote that in the struggle for a legal reduction in the working day "A political movement, that is, a movement by a class striving to pursue its interests in a general form, that is, a form taking on a compulsive force for all of society, arises everywhere out of the isolated economic movements of the workers."(14)

Lenin emphasized that "The working class is not capable of struggling for its freedom without bringing influence to bear upon government affairs, upon the administration of the state, and upon the issuance of laws."(15)

These observations of Marx and Lenin retain all their force to our day. The Communist and Workers' Parties of the capitalist countries are guided by them in their political activity. Let us cite France and Italy as examples. The Communist Party of France has, over a long term of years, conducted a consistent and stubborn struggle against the policy of the capitalist and petty bourgeois parties to bar participation in the government of representatives of one of the largest political parties of France — the Communist Party — for which more than a quarter of all the voters cast their votes. The French Communists have exposed the anti-democratic and reactionary nature of this policy. The Italian Communists also struggle against the policy of the ruling Christian Democratic Party, which monopolizes political power in the country. They demand creation of a government with participation of representatives of a left party — the Communist and Socialist — for which more than a third of all the voters cast their ballots.

Lenin, during the years of the First World War, conducted a decisive ideological struggle against people who, calling themselves Marxists, denied the need for political struggle for democracy in a period of imperialism. Such "Marxists" believed that inasmuch as imperialism brings about the dominance of reaction, and is the eve of the socialist revolution, the working class must conduct a struggle only for its ultimate goal — for socialist transformation of society.

This position, which is foreign to the Marxist understanding of the relationships between struggle for reform and struggle for revolution, can only do harm to the cause of the working class. In exposing this position, Lenin wrote "Capitalism in general, and imperialism in particular, transformed democracy into an illusion; and at the same time, capitalism stimulates democratic strivings among the masses of the people, creates democratic institutions, and sharpens the antagonism between imperialism that denies democracy, and the masses of the people striving toward democracy."(16)

State monopoly capitalism gives rise to the same antagonisms today. On the one hand, the development of state monopoly capitalism doubtless strengthens the position of finance capitalism. The rulers of the monopolies and their agents in the organs of government bring various forms of state monopoly capitalism into being, the reason being, of course, not the welfare of the people but the narrow selfish interests of the topmost elements in the financial oligarchy at the top, and the masses of people led by the working class, which strive to make use of certain forms of state monopoly capitalism in order to isolate the monopolist top groups, and in the interests of the people.

A bitter class struggle has proceeded around the development of state monopoly capitalism during its entire history. The disposition of forces in this struggle is clear. On the one hand, there is the monopolist capitalist class, guided by the interests of preserving and strengthening capitalism, the interests of squeezing out super profits. And on the other hand, there is the working class, led by its vanguard, the Marxist-Leninist parties, which unite the broadest masses of the people in struggle against the unshared rule of monopoly; for social progress, for peace, democracy, and socialism.

We know that the ruling circles of the monopolist capitalist class use various methods to attain their objectives. In some cases, they favor nationalization of certain enterprises or branches of industry; and in other cases, seek to restore them to private ownership. It is impossible not to see that nationalization and restoration to private ownership constitute only two sides of the same policy of monopoly capital: to advance one or the other aspect as circumstances change. In brief, the policy of the capitalist class resolves itself to nationalization of losses and reprivatization of profits.

This is particularly clear in the case of the United States. During the Second World War, a broad expansion of industrial construction at government expense met the interests of monopoly. We know that at the conclusion of the Second World War, the large monopolies acquired government-owned enterprises for a song. In the capitalist countries of Western Europe, the monopolies carry out other measures making for an enormous growth in super profits. The capitalist government takes over enterprises or branches of industry operating at a loss, and provides the monopolies with cheap coal, electric power, transportation services, etc. At the same time, the monopolies seek restoration to private ownership of profitable enterprises of manufacturing industry which bring them enormous returns.

The example of England is most characteristic of this. In 1945, the Labor Party won a parliamentary victory over the Conservatives, primarily because they promised to nationalize the key branches of the economy. On coming to power, the Labor Party conducted nationalization, but did so on a capitalist basis, and fully upheld the interests of the monopolist bourgeoisie. In the period which followed, the Labor Party renounced its program of nationalization, substituting for it the idea of "participation" of the government in private share companies. This completely exposed the essence of the reformist policy of the right-wing leadership of the Labor Party, which follows a course in the wake of the interests of the monopolist bourgeoisie.

The General Secretary of the Communist Party of Great Britain, John Gollan, in his pamphlet, "Why Nationalization?" writes that nationalization conducted in the interests of the working people must differ in character from the measures carried out by the post-war Labor Government. It must be socialist nationalization, embracing all large-scale industry and commerce, and not only branches of industry. The agencies of administration of industry must consist in their entirety of workers and technical specialists, and the participation of the workers and their unions therein must be democratic in nature. The degree of compensation must be considerably reduced, and limited to a definite term of years.

Similar demands are advanced by the Communist Parties in other capitalist countries.

The Communist Party of Italy proceeds from the concept that under given political circumstances nationalization of industry controlled by the government may become a tool for undermining the rule by the monopolies. Resolutions of the Eighth Convention of the Communist Party of Italy note that:

"It is necessary to elaborate measures for a real democratization of industry under the control of the government, giving it an anti-monopolist direction."

Utilization of industry controlled by the government in the interest of the working people presupposes that certain transformations occur. In the first place, it is proposed to free the enterprises controlled by the government from the influence of private large monopolies by placing them under the control of parliaments with wide democratic representation. Further, it is necessary to reorganize the entire complex of enterprises under government control. There was a time when the agencies controlling these enterprises were established not to administer them but to carry out financial measures to prevent bankruptcy that was threatening these enterprises. Today, the matter at issue is unification of the government owned enterprises into a single industrial complex, modernization of their equipment, etc
This would open wide possibilities for their modernizatio
by means of government capital investment. However, th
social and economic transformations which would be the
result of the democratization of industrial enterprises co
trolled by the government would be of particular importa
In its programmatic declaration, the Communist Party of
Italy notes "Even transitional forms of state capitalism m
open the road to socialism, if this tranformation is accompanied by a democratic political struggle that assures
to the working masses access to administration of the
government and places in their hands effective control
over utilization of public property."

Thus the fundamental contradiction between two different approaches to the problem of the development of state
monopoly capitalism in the present period is revealed.

On the one hand, the monopolist capitalist class and its
reformist agents are guided in their attitude toward vario
manifestations of state monopoly capitalism by the selfish
interests of assuring the high profits of monopoly to the
largest trusts, companies, and banks. This position is pr
foundly reactionary and against the interests of the people

On the other hand, the working class, led by its Marxis
Leninist parties, takes a consistently progressive positio
with regard to state monopoly capitalism. Representative
of the working class expose the anti-popular domination o
monopoly capital, and advance positive proposals proceed
ing from the interests of the broadest masses of the peop
from the interests of social progress, democracy, and
socialism.

Modern revisionism, which proclaims itself to be some
sort of "third force," in reality serves one of the two con
flicting forces faithfully and truly — to wit: the monopolis
capitalist class.

FOOTNOTES

(1) Frederick Engels, Anti-Duhring, Government Politic
Publishing House, 1957, pp. 261-262 (Russian editio
(2) Karl Marx, Capital, V. 1, 1954, p. 493 (Russian editi
(3) Frederick Engels, Anti Duhring, p. 263 (Russian edition).
(4) V. I. Lenin, Collected Works, V. 23, p. 51 (Russian edition).
(5) V. I. Lenin, Collected Works, V. 22, pp. 92-93 (Russ
edition).
(6) See V. I. Lenin, Collected Works, V. 24, pp. 276-277
(7) V. I. Lenin, Collected Works, V. 16, p. 318 (Russian
edition).
(8) See Marx and Engels, Collected Works, V. 16, Part
pp. 105-106 (Russian edition).
(9) V. I. Lenin, Collected Works, V. 25, p. 414 (Russian
edition).
(10) Ibid, pp. 414-415.
(11) V. I. Lenin, Collected Works, V. 25, p. 333.
(12) Frederick Engels, Anti Duhring, p. 262.
(13) Marx and Engels, Selected Correspondence, 1953, p. 347 (Russian edition).
(14) Ibid, p. 271.
(15) V. I. Lenin, Collected Works, V. 2, p. 100.
(16) V. I. Lenin, Collected Works, V. 23, p. 13.

I. Osadchaya:

Concerning Contempory Bourgeois Theories of Economic Dynamics

In the last decade, so-called theories of economic dynamics have become widespread in the United States, England, Sweden, and a number of other capitalist countries. The authors of these theories declare that their objective is to disclose the basic factors governing the development of social production, the forms and results of relationships between these factors, and on this basis, to find methods of government regulation of the economy. In posing such problems, the bourgeois economists seek somehow to bring vulgar political economy up-to-date by replacing the old theories of "static equilibrium" by theories which correspond to a greater degree to the objectives of capitalist apologetics under the conditions of its general crisis.

The development of modern theories of economic dynamics dates from the thirties of the present century. During this period, the works of the English economist Harrod, who is regarded as the founder of these theories, made their appearance. Their appearance was induced by the catastrophic results of the world economic crisis of 1929-1933 and the depression following it which compelled capitalist economists to examine much that they had deemed unassailable. During the second World War, and in the post-war period, interest in theories of economic dynamics continued to rise. The exceedingly uneven nature of the economic development of capitalism, the frequent fluctuations in production due to market circumstances, inflation becoming chronic, are explainable in the opinion of many capitalist economists only on the basis of a theory of dynamics — that is, a theory attempting to provide a foundation for the process of economic development as a whole. The majority of the advocates of the theory of economic dynamics belong to that school in capitalist economics which has come to be termed Keynesian. Among them note should be taken of R. Harrod, J. Hicks, N. Kaldor (England), E. Domar, A. Hansen, T. Samuelsen (USA), etc. Economists of this school, while criticizing individual shortcomings of Keynesianism as limited and static in nature, do however employ its theoretical equipment — the theory of effective demand, the multiplier, the concept of "propensities" etc., in constructing their dynamic models.

The partisans of modern theories of economic dynamics speak out against the traditional initial hypothesis of bourgeois political economy, the principle of "static equilibrium." In its time, the concept of "static equilibrium" met the interests of the bourgeoisie. The authors of these concepts, refusing to consider changes in technology and the growth of capital investment, posed as their main problem, determination of such a relationship between the various factors in production which would bring the maximum result, or in other words, maximum production and maximum profit under given circumstances. These theoretical propositions served the purposes of praising free competition as allegedly an ideal mechanism for regulation of capitalist production. These positions, which are in crying contradiction to reality, no longer meet the new problems facing capitalist political economists. The authors of theories of economic dynamics hold that the object of investigation should be changes in production, and the discovery of factors determining its development and the interrelationships developing in the course of expanded reproduction.

To cite an example: the English economist Baumol formulates the essence of these theories as follows: "Economic dynamics is the study of economic phenomena as related to prior and subsequent changes."*

In dealing with problems of expanded reproduction, these authors of the dynamic theory prove incapable of making a single step in the direction of a truly scientific analysis of its regularities. Discarding the conception of "static equilibrium," they neverthless retain their former methodology, ignoring relationships of production and fundamental contradictions of capitalism. Karl Marx noted in his day that the process of expanded reproduction and of the constant revolutionization of technology is carried out under the conditions of capitalism on the basis of private ownership of the means of production, and that this gives rise to and strengthens the contradictions of the capitalist system, in particular the contradiction between the social nature of production and the private form of appropriation, between rapid development of productive forces and the limited effective demand of the working people. To this single scientific theory of expanded capitalist reproduction, the bourgeois economists attempt to counterpose their thin scheme, of capitalist development without contradictions, without an analysis of production relationships fettering the development of the productive forces. The theory of economic dynamics is characterized by the following primary components:

1. The authors of these theories attempt to resolve primarily the problem of the causes of economic growth and the factors which accelerate or inhibit its rate. They concentrate their attention primarily on the tendencies of long-term development. They assert that these tendencies determine economic development over a considerable period of time and govern the nature of cyclic and market fluctuations. The appearance of this problem is doubtless intertwined with the general crisis of capitalism. It is specifically the general crisis, and its consequence, which are catastrophic for capitalism, that have compelled bourgeois economists to deal seriously with the future outlook for capitalist production, its prospects, the nature and the direction of its development. However, not desiring to recognize the inevitability of the downfall of capitalism, they either distort the true tendencies of its development, or merely keep silent about them. Bourgeois economists ignore the economic laws of capitalism, and deny so important a tendency as the tendency of the rate of profit to fall. As a rule, they avoid, by silence, the transformation of capitalism into monopoly capitalism. They ignore, or else give a completely false analysis of, the development of the general crisis of capitalism. Usually, bourgeois theories of economic dynamics deal simply with the diminution in or increase in rates of development of production, entirely outside the relationship to its social forms.

2. The most important problem attracting the attention

---

* W. Y. Baumol, Economic Dynamics, New York, 1952, p. 2.

of many theoreticians of economic dynamics is the formulation of conditions for what is termed the "dynamic equilibrium." This is depicted as an ideal condition for development of production, under which neither crises nor inflation could occur. The main condition for "dynamic equilibrium," they regard as being a correct determination of the rates of increase in production of capital investments and national income.

3. The problem of crises also occupies an important place in theories of dynamics. In the opinion of these authors, a correct theory of crises can be created only on the basis of investigation of the process of development as a whole. Harrod, for example, asserts that analysis of economic dynamics is "a necessary precondition for investigation of the commercial and industrial cycle."* Distorting the true reasons for crises, he attempts to depict them as simple deviations that are inevitable in the course of technical progress, and are as it were "social costs" thereof.

As we have pointed out, the general foundations of bourgeois theories of economic dynamics are identical, but the methods of construction thereof differ.

The most widespread is the mathematical method of investigation. By means of equations ranging from the simple algebraic to systems of differential equations, economists who employ this method attempt to express the fundamental relationships of expanded reproduction. This method characterizes to a greater or lesser degree all the work of the Keynesians, the Swedish economists of the Stockholm School of Political Economy, and a number of others. Those bourgeois economists who attempt to depict the economic process of development as a result of the action of numerous economic and extra-economic (social, political, psychological, etc.) factors, make use of a simple descriptive method of investigation (Rostow, A. Lewis in the United States, B. Kierstead in Canada). Some of them employ a purely empirical method of investigation, attempting to establish the fundamental tendency and principle of development, and elaborating statistical material accordingly. (For example, S. Kuznets in the United States.)

In the post-war period, hypotheses advanced in the works of Harrod, who posed the problem of discovering the causes of unemployment, and suggesting possible methods of "curing" capitalism of this illness, have become particularly popular in capitalist political economy. However, Harrod's prime concern is the problem of the increase in production and the creation of conditions for the post-dynamic equilibrium.

"We will not pursue a healthy policy," he writes, "if we examine the problem of unemployment from month to month without any connection with the question of what stable level of capital expenditure is required to enable the economy to develop in accordance with the requirements of its fundamental conditions."†

The main factors in economic growth are deemed by Harrod to be the accumulation of capital and the relationship between growth in income and the dimensions of accumulation. He combines two principles in order to explain the nature of this relationship, the principle of the Keynesian multiplier; and the principle of the accelerator advanced by Aphtallion. The former is a factor allegedly reflecting the relationship between increase in investment and increase in national income. The second, in his opinion, is a brief expression for the relationship between changes in consumption and change in the volume of investments. In accordance with his theory, expanded reproduction occurs in the following fashion: Capital investments cause an increase in the income of sc ciety (the action of the multiplier), and this gives rise to demand for consumer goods. In order to satisfy this dema it is necessary to expand the production of consumer good Consequently, a demand arises for the erection of new ent prises, and this in turn increases the demand for means c production. As a result, the increase in income gives ris to a series of new capital investments of a derivative nature (acceleration). Further, the entire process is repeat but on a higher level. New capital investments result in a further increase in income; the increase in income gives rise to new capital investments, etc.

The theories of the multiplier and accelerator reflect i irrational form certain relationships that actually do exis in production, inasmuch as production and consumption ar interrelated and affect each other in the course of expande reproduction. However, neither the multiplier nor the accelerator constitute precise indices of these relationships inasmuch as these theories do not take into consideration number ofphenomena — primarily the economic contradictions of capitalism. In accordance with the theory of a mu tiplier, the scope of capital investments automatically results in an increase in income proportionate thereto, and this in the long run increases total consumer demand. Ho ever, no such direct relationship exists in reality. It is true that the expansion of production at individual enterprises, and during individual periods, may take place as a result of the increase in the numerical size of the working force; and this gives rise to an increase in the total wage fund. However, as a rule this occurs on the basis of an in crease in the organic composition of capital, the introduction of new technology, and as a result employment of lab power undergoes a relative decrease. The wage fund rise more slowly than the volume of production. As far as wag are concerned, they are limited under the conditions of ca talism within the narrow framework of the value of labor power. Thus the principle of the multiplier ignores the co tradiction inherent in capitalism between production and c sumption, and "abstracts" from the fact that effective den lags behind the growth of production.

In turn, the principle of the accelerator also distorts th real relationships existing in capitalist production. It assumes that increase in the national income results in a pr portional increase in new capital investments. However, t constant relationship expressing a constant value also doe not exist in reality, inasmuch as the organic composition capital undergoes a constant change due to the increase in technical improvements. Moreover, this principle does n take into consideration such forms of capital investment a do not constitute direct results of increase in consumer d mands: capital investments by government, investments r lating to scientific discoveries, etc.

Thus, Harrod separates production from its social forr from its production relationships, and ignores the econon contradictions of capitalism, thus barring the road to an examination of objective economic relationships in capita ist producion.

A guaranteed rate of growth occupies the most importar position in Harrod's system of theoretical construction. With its aid, Harrod attempts to answer the question: Wha are the rates at which a capitalist economy must develop order to assure complete utilization of all productive cap ities ? In other words: At what rate must income increa and with it demand, in order that all the means of production in existence today be purchased and employed for expanded production tomorrow? A guaranteed rate of grow in accordance with Harrod's definition, although it provid complete utilization of productive capacities, nevertheless does not exclude "forced unemployment." In his words, this is the "line of entrepreneurial equilibrium."

---

* R. F. Harrod, Economic Essays, London 1952, p. 263.

† R. F. Harrod, Toward a Dynamic Economics, London, 1948, p. 74.

In determining the guaranteed rate of growth, Harrod proceeds from a number of parameters, which in his opinion may be deemed to be constant over a long term of years. They include the propensity of society to save, or the standard rate of accumulation of capital (S), and the magnitude of capital expenditures for unit increase in production. In other words, the "ratio" as Harrod terms it (Cr).[*]

If the share of accumulation in income, S, is a constant magnitude, that is, if a definite share of the social product represents means of production set aside for expanded production, then what must be the rate at which income must increase in order, at a given magnitude of capital expenditures per unit increase of production, to assure complete productive utilization thereof? If the former, that is, the magnitude of accumulation, S, be conceived of as the investments offered, and the latter as the demand for investments determined by the constant ratio (Cr), and by the rate of increase per income (Gw), it may be stated that the guaranteed rate of growth must assure equality between supply and demand for investments. Thus Harrod obtains the following equation: $Cr \times Gw = S$, where $Cr \times Gw$ is the need for means of production and S is the actual offering of means of production.

From this the guaranteed rate of growth is increased, it is determined: $Gw = S/Cr$.

"The only guaranteed line of growth," writes Harrod, "is determined by the propensity to save and the amount of capital required by technological and other conditions per unit increase in gross production. Only if the entrepreneurs sustain this line of development will they find that, as a whole, their production during any given period of time will be neither excessive nor inadequate."[†]

The major conclusions drawn by Harrod from this formula lie in the fact that the guaranteed rate of growth is a constant, inasmuch as, according to Harrod, S and Cr are unchanging. This means that stable development, which would assure complete utilization of productive capacity, is possible only if income increases in geometric progression: and this would mean an ever more rapid growth of income in absolute terms.[‡]

In his theory of guaranteed rate of growth, Harrod bases himself on certain statistical investigations made in the United States and Britain to determine the share of accumulation in the national income, and the magnitude of capital expenditures per unit of production ("the capital coefficient"). However, Harrod and his partisans operate with the data obtained from these investigations in a manner that is arbitrary to the highest degree. In proving the constancy of the share of savings in income over a long term of years, they often rely upon the data of the American bourgeois economist S. Kuznets. However, these data prove exactly the opposite. (See table next page.)

In accordance with these data, the share of accumulation in the course of the entire period under investigation diminished, even if one does not take into consideration the crisis of 1929-1933 and the depression which followed it, when the percentage of accumulation dropped to 1.4 per cent. At the end of the nineteenth century it was 16 per cent, and during the first quarter of the twentieth century it was 10.2 per cent.

Harrod's assertion that the "capital coefficient" is constant is also one to which objection should be raised. Bourgeois economists display the widest variety of opinions on the question of the constancy of the "capital coefficient." Certain economists, Stern in particular, are inclined to assert that the capital coefficient is constant in nature. Basing himself on the data of Kuznets and Boley, he draws a conclusion that in the United States an increase of $320-330 in capital investments yielded a hundred dollars of increase in pure national income. In England the same result was obtained as a result of increase of capital investment by $327. Thus the capital coefficient for these countries, according to Stern, comes to 3.3 on the average. Stern also attempts to define what the accumulation standard would be that these countries should adhere to, to maintain a given rate of growth. If England were to show a growth of 2.25 per cent, it should save $3.3 \times 3.25 = 7.4$ per cent of its total national income. While for a rate of growth of 1.75 per cent, it should save $3.3 \times 1.75 = 5.8$ per cent. The United States, for a 3 per cent rate of growth should save $3.3 \times 3 = 9.9$ per cent.[*]

In associating himself with this group of economists, Harrod attempts to "substantiate" their manipulations by his theory of "neutral progress." The essence of this theory lies in the following: There are two types of technical innovations. One saves labor and increases the ratio of capital (he means means of production) to labor (in other words the organic composition of capital). Others, however, save capital, and reduce the ratio of capital to labor. In this respect, they compensate each other, as a result of which the ratio of capital to labor and the organic composition of capital do not change. This theory is in clear contradiction to the fact of the growth in the organic composition of capital. Of course, this growth may not manifest itself directly and invariably, inasmuch as technological progress itself does not proceed along a straight and uniformly rising line. However, the tendency toward an increase in the organic composition of capital cannot but exist, inasmuch as this is the reverse side of technical progress and increase in labor productivity. The fact is that the very indices of the relationship of capital to labor which, to a considerable degree, may reflect the motion of the organic composition of capital, bear witness to the fact that the tendency to increase in organic composition of capital does exist in reality, even though it is realized exceedingly slowly, and in a manner that is by no means linear.

Thus Harrod's theory of the "neutrality" of technical progress, and his assertion to the effect that the "capital coefficient" is constant, prove wrong and in contradiction to the facts of the development of capitalism. However, if neither S nor Cr in Harrod's formula are constants, there is no single guaranteed line of development and rate of growth corresponding to this line. Each given value of S and Cr will have its own guranteed rate of growth. However, an index obtained in this way cannot serve as a guaranteed rate of growth for all periods, inasmuch as the values determining it undergo slow but constant, and sometimes sharp, changes.

The analysis we have made provides the basis for asserting that the theory and formula of the guaranteed rate of growth is an abstract scholastic construction founded on speculative deduction. It is characteristic that Harrod's theory of the guaranteed rate of growth has given rise to considerable doubts even among some capitalist economists.

---

[*] This same index is also termed the accelerator, coefficient of acceleration, or capital coefficient.

[†] R. F. Harrod, *Economic Essays*, p. 265.

[‡] The American economist Domar came to the same conclusion. Therefore, the reference usually is to the Harrod-Domar Theory of Growth.

[*] *Economics*, London, 1945, pp. 167-170.

Pure Capital Formation as Percentage of the National Income of the USA (in prices of 1929)*

Decade	Pure capital formation	Decade	Pure capital formation	Decade	Pure capital formation
1869-1978	13.7	1889-1898	16.2	1909-1918	13.0
1874-1883	14.4	1894-1903	14.8	1914-1923	11.4
1879-1888	14.6	1899-1908	13.6	1919-1928	6.0
1884-1893	16.1	1904-1913	13.1	1929-1938	1.4

* S. Kuznets, National Income, New York, 1956, p. 53

Thus, for example, the French economic Billet, in his paper at the conference of the International Economics Association in Rio de Janeiro August 19-28, 1957, in noting the variability of the "capital coefficient," and the standards for savings employed in the formulas of Harrod and Omar, declared that the value of such models for prognoses or politics is limited apparently to such short periods as to exclude structural changes. If this is true, then one cannot rely on such models to be useful for countries planning their future.

Inasmuch as the guaranteed rate of growth, in Harrod's opinion, provides only for complete utilization of productive capacities, but for incomplete employment, Harrod therefore advances another concept (the natural rate of growth). According to him, this rate provides for full utilization both of productive and of human resources. It is determined by such factors as the natural increase in the population, the level of technical development, the presence of productive resources, etc. The natural rate of growth is the maximum attainable in the development of a given society. The ratio between the guaranteed and natural rates of growth is one of the central problems in the theory of economic dynamics as developed by Harrod. The difference between the two, in Harrod's opinion, is the reason for the fact that the economy experiences continuous stagnation over long periods, accompanied by chronic unemployment, or continuous growth, accompanied by inflation. In accordance with this theory, if the guaranteed rate of growth exceeds the natural rate, there will be a condition of long-term overproduction. Society saves excessively, and spends exceedingly little. Under these conditions, Harrod recommends the pursuit of a policy of reducing the standard of savings, and reducing the guaranteed rate of growth. And contrariwise; under conditions of reduction in the guaranteed rate of growth to below the natural rate, a condition of chronic insufficiency of means of production develops, stimulating a long-term upturn and inflation. Thus the theory of guaranteed and natural rates of growth is used by Harrod to attempt to provide a foundation for a theory of long-term tendencies allegedly existing in the development of the capitalist means of production. In actuality, theoretical manipulations of this type only move away from a truly scientific elaboration of the problems of the development of capitalism. Harrod's shcemes not only do not explain anything in capitalist reality, but are in direct contradiction to the actual course of its development.

In order to explain the causes for the cyclical nature of development, Harrod introduces a third concept, "the factual rate of growth." The difference between the factual and the guaranteed rate of growth, in accordance with his theory, gives rise to cumulative processes leading either to an industrial upswing or to a crisis. If the factual rate of growth exceeds the guaranteed rate, an inadequacy of means of production develops. In attempting to liquidate this inadequacy, the entrepreneurs will increase the rates of growth of production even more rapidly, with the result that the spread between the means of production offered for sale and the demand for them will become even greater, giving rise to a boom and to inflation. In the opposite instance, reduc
tion in the actual rate of growth will lead to a reduction ir
demand for means of production, and an excess thereof wi
appear. This will compel the entrepreneurs to reduce the
rate of increase of production to an even greater degree,
and this will give rise to a cumulative crisis of drop in
production or, in other words, a crisis.

The result of all this reasoning is that Harrod conclude
that economic development is unstable, and that automatic
establishment of equilibrium is impossible.

"Centrifugal forces compelling the system to deviate
ever more widely from the requirements of the line of pr
ress, operate around the line of progress, and it is only
this line that can give satisfactory results," he writes.*

This conclusion is remarkable in itself. It undermines
the fundamental proposition of bourgeois political econom
which depicts the mechanism of capitalist production as
self-regulating and one in which deviations from a condition of equilibrium immediately give rise to forces restor
ing this equilibrium. However, Harrod not only gives no
answer to the main question, that of the causes giving ris
to the cyclic nature of the development of capitalist produ
tion, but only confuses the problem further, taking the rea
er into the area of purely accidental causes having no rel
tionship to an explanation of the capitalist system of production. According to Harrod, deviation in the factual rat
of growth from the guaranteed rate can be induced by an u
even development of individual branches of industry, due
to seasonal fluctuations in production, or simply by accid
tal causes, including errors in the determination of the ra
of growth.

This theory of Harrod's is incapable of answering the
question as to why the process of expanded reproduction i
interrupted, or why economic crisis is interrupted and a
phase of industrial upturn begins. It follows from Harrod'
theory that natural factors represent the bounds for the u
turn: the presence of labor power, technical level of produ
tion, and so forth; and that these determine the natural ra
of growth.

Harrod's theory is not substantial inasmuch as it ignor
the capitalist form of production, abstracts from the moti
force of development of capitalists society—surplus value—
and from the contradiction between the social nature of
production and the private form of appropriation.

Today many bourgeois economists have been compellec
to acknowledge the unreality of Harrod's theory. True, th
do not see, or do not wish to see the reasons for this lack
of reality: to wit, that it ignores the objective economic
laws of capitalism. Criticizing Harrod for the fact that h
theory is extremely formalistic in nature, they attempt tc
counterpose a more "realistic" one to it, one that is more
realistic from their point of view, but that is equally unsu
cessful in analyzing capitalist development.

If Harrod's theory establishes only a relationship between two phenomena — the accumulation of capital and t ate of growth of social production — the authors of these heories of dynamics attempt to examine economic development as a result of the action and interaction of a multiplicty of economic and non-economic causes. They include, in particular, the American economist Rostow. In criticizing Harrod's theory, Rostow asserts that it is valid only to lemonstrate the hypothesis of unstable development:

---

* R. F. Harrod, Toward a Dynamic Economics, p. 86.

"If, however, we prefer to ask what determines the rate of growth of production, then, in order to answer this question," e writes, "it is necessary to find another theoretical scheme... The logical, and to be more exact, the mathematical concept in accordance with which investment is a function of the ate of growth of income distracts attention from a more ystematic investigation of the process of economic growth nd development as a whole."[*]

The "innovation" advanced by Rostow consists of his method of investigation. The sphere of investigation studied by Harrod does not go beyond the framework of technical and economic relationships. Rostow, however, includes therein the so-called "social structure," by which he means the entire complex of social phenomena, social and political institutions, ideas, religion and culture, characterizing society. The idea that the social and political structure have a determining role is united by Rostow with the Keynesian psychological conception of propensities. He suggests the following six propensities which, in his opinion, determine the ate of economic development, and "reflect the degree of deviation of true economic decisions on the part of society rom those which we would have if only economic motives were at work."[†] These include:

The propensity of the basic sciences to develop;
The propensity to employ science to attain economic objectives;
The propensity to introduction of innovations;
The propensity to material progress;
The propensity to consumption; and
The propensity to bear children.

These propensities allegedly depend upon the political and social organization of society, and have an effect upon the rate of economic development. Rostow does not attempt to differentiate the major social factors determining one or another phenomenon from those that are secondary in importance: that is, from those which merely change the appearance of, and modify the given phenomenon. He even regards this to be a service on his part. Rostow accuses his ideological opponents of economic determinism. As we know, various factors affect the course of the historical and economic development of society: economic, natural, sociological, and others. But among this complex of phenomena, it is necessary to distinguish economic relationships as fundamental and most important, in that in the long run they have a decisive influence upon the course of the historic development of human society:

"The political, legal, philosophical, religious, literary, artistic, and other developments are based upon economic developments. But they all influence each other, and influence the economic base as well. The situation is the sole active cause, and the rest merely a passive consequence. So, here we have interaction on the basis of economic necessity; which, in the final analysis, will always find its way."[‡]

Rostow dissolves the relationships of production into an indefinite and diverse concept of social structure, all the elements of which are allegedly equal in value in terms of their influence upon the course of economic development. This anti-scientific posing of the question is one of the fundamental methods of contemporary capitalist political economy. It serves the interests of the defense of capitalism, inasmuch as it makes it easy to "find grounds for" possibilities of regulation of capitalism, "transformation" thereof, etc.

It is easy to understand that a capitalist theory that makes no provision for relationships of production and economic laws cannot even pretend to a scientific analysis of the reasons for economic crises. Rostow is even far removed from the idea, which some bourgeois economists advocate, of ascribing the cause of crises to overproduction. He is a bitter opponent of the very idea of general overproduction. Crises, in his opinion, are due to disproportions in the distribution of investments, which give rise to partial overproduction in individual branches of the economy. In this connection, Rostow believes that the causes for disproportions are purely technical and psychological factors, allegedly having no relationship for the capitalist form of production.

To describe partial disproportions as the reasons for crisis is to distort reality, concealing the true nature of crises and their real causes. Disproportions are inherent in capitalism, they are components of its very essence. Any law of capitalism is realized by means of its non-realization, by means of constant fluctuations, "as a blindly operative law of averages."[*] Partial disproportions give rise to the possibilities of crises but in themselves do not account for the inevitability thereof.

Rostow maintains silence as to the contradiction between the social nature of production and the private form of appropriation, the contradiction between the limitless tendencies of capitalism to develop the forces of production and the narrow limits of effective demand on the part of the population. These contradictions are inherent in capitalism, which is unable to exist without them, and within them lies the cause of economic crises.

Explanation of crises in terms of partial disproportions serves as the basis for Rostow's practical conclusions with regard to the essence of the policies to be pursued by a capitalist government. A most important factor in government control over the economy should be control over the structure of investments. This is the conclusion that Rostow draws:

"The problem of control of the commercial and industrial cycle is not only a problem of the required level of overall expenditures (that is: investments plus consumption), but also the problem of attaining an appropriate composition of new investments."[†] He writes, "However, control over the structure of investments must not be," in his words, "a synonym for general control by government." Rostow does not even attempt to say anything instructive as to how such control can be realized under conditions of the capitalist system of production.

Rostow, like Harrod, gives his main attention to examination of tendencies of long-term developments. However, contrary to Harrod, he approaches this question from purely empirical positions, denying the existence of long-term cycles in the movement of income and employment. The tendencies of long-term development, in Rostow's opinion, are expressed in "the relationship of intersector prices in the dominant character of investments, and in income from them, and in the overall tendency as far as prices are concerned.” The cause for these tendencies, in Rostow’s opinion, is chiefly the continuing growth of production induced by wars or capital investments with long periods of turnover (in agriculture, in the development of raw materials, etc.), leading to long-term overproduction in individual branches of the economy. All this, however, has no direct relationship to the true long-term tendencies in the development of capitalist production.

---

[*] W. W. Rostow, The Process of Economic Growth, New ork, 1952, p. 91.

[†] W. W. Rostow, The Process of Economic Growth, p. 36.

[‡] Karl Marx, Frederick Engels, Selected Correspondence, ate Political Press, 1953, 470 pp. (Russian edition).

[*] Karl Marx, Capital, Vol. 1, 1954, p. 109 (Russian edition).

[†] W. W. Rostow, The Process of Economic Growth, p. 122.

It is readily seen from Rostow’s theoretical constructions that a purely empirical approach to facts not based on a correct theory has nothing in common with science and cannot lead to correct conclusions.

The Canadian economist Kierstead differs from the economists who are ideologists of the large capitalists, in that he puts forth a criticism and condemnation of the monopolies. He reflects petty bourgeois views in the theory of economic dynamics. The object of Kierstead’s investigation is the process of long-term development. He examines, in the first place, factors determining the processes of development, in the second place, tendencies giving rise to various combinations of these factors and, in the third place, structural changes (by which the author means development of monopolies) occurring in the course of economic development and the effects of these changes upon development in turn. According to Kierstead, the process of economic development is determined by the effects of the following factors: technical innovations, changes in the number and the composition of the population, and geographic discoveries. In addition to objective factors, he examines subjective ones such as the goal set by people for themselves, and expressed through social institutions and policies.

Kierstead attempts to present the structural changes occurring in the course of the economic development of capitalism.

“I contend,” he writes, “that examination of changes in the total magnitude of income, investments, expenditures, and employment alone are inadequate for my purposes. Therefore, major attention is given to structural changes, particularly structural changes in the market.”* However, he confines himself to this, without digging into an investigation of the economic laws that govern the development of the capitalist method of production, and determine the specific forms of its development.

Kierstead attempts to show that technical progress is the chief factor in economic development, and that it inevitably gives rise to monopoly. He writes that, in the course of technical progress, there occurs a process of concentration and centralization of capital, in which the smaller and weaker firms are driven out of business, the larger survive and develop, and that in the final analysis this facilitates agreements between the various giants and gives birth to monopoly.

Although Kierstead recognizes that technical progress gives rise to the development of monopoly “under given institutions,” that is, when private property rules, he asserts, nevertheless, that that which gives rise to monopoly is not the capitalist form of production, not the economic laws of capitalism, but technical progress as such. Thereby, following in the footsteps of the apologists of monopolist capital, he includes in his concept of monopolies not only the combinations of capitalists, but the trade unions of workers. This falsification is very convenient for the defense of capitalism. With its assistance, he attempts to ascribe all the faults of contemporary monopoly capitalism to monopoly in this arbitrary and broad interpretation of the term. He “converts” to his purposes Hansen’s not unfamiliar theory of “eternal stagnation.” The true cause for stagnation, he asserts, is the growth of monopolies. Eliminate monopol and capitalism will be saved.

Kierstead also attempts to provide a foundation for the fact that capitalist society is divided into classes. The c cept that “technical progress equals monopoly,” advocate by him, has as its result that, contrary to the facts, he se in capitalist society the following two classes, the intere of which, in his words, cannot be reconciled: the owners the large trusts and skilled workers who are united into trade unions, and are allegedly “adherents of the existing social institutions,” on the one hand, and, on the other, th mass of unskilled workers and small entrepreneurs who are dissatisfied with the existing order of things. Thus Kierstead distorts the real disposition of class forces in contemporary capitalist society. He artificially divides working class, one portion, those organized into trade unions, being combined by him with the monopolists. And h ascribes to this portion of the proletariat the tendency to maintain monopoly capitalism, while the other portion he lumps together with the small capitalist entrepreneurs. The economic independence and unity of interest of the working class, struggling to replace the capitalist system by a socialist system, disappears in the picture drawn by this ideologist of the petty bourgeoisie.

Along with the majority of contemporary bourgeois ecc omists, Kierstead regards the cyclic development of cap talist production as a consequence of technical progress. his words, crises are “the social costs of progress,”* w are themselves insignificant, and therefore do not deser special attention. If the ordinary cyclical crisis coincide in time with a recessive tendency of long duration, such crisis, in his opinion, really presents a serious danger. Inasmuch as the main cause for a depressive tendency at the present time, in accordance with his conception, is th growth of monopolies, this is also the cause for profound crises and unemployment. From this Kierstead draws th conclusion that, if you eliminate the monopolies, crises will be reduced to insignificant fluctuations, not providin any serious danger to capitalism. From this viewpoint, criticizes the fiscal policy of the modern capitalist gover ments, which he regards as incorrect or insufficiently fl ible, as it does not affect the monopolies. Government p cy should, in Kierstead’s opinion, free society from the of all evils — the oppression of monopoly.

Kierstead’s reasoning as to the causes of the developm of monopoly, and his conclusions with regard to methods struggle therewith, are absolutely lacking in substance. know that monopoly leads to a further intensification of a the contradictions of capitalism, and that it gives rise to number of new antagonistic contradictions. But monopol is itself the result of the economic laws of capitalism.

“Imperialism arose,” V. I. Lenin pointed out, “as the velopment and direct continuation of the fundamental pro erties of capitalism as a whole.”† It is precisely the law of capitalism, and not only monopoly, that give rise to th inevitability of crises and unemployment, of social inequ ity, of contradiction between production and consumption capitalist society. All these faults of capitalism existed and developed in the pre-monopoly era as well, although imperialism has vastly multiplied them. Only a proletar revolution is capable of eliminating capitalism — and wi it capitalist monopoly. Hopes placed by Kierstead on reforms and a “mixed economy,” which he regards as the ideal within the framework of parliamentary democracy, represent a petty bourgeois illusion.

---

* B. S. Kierstead, The Theory of Economic Change, Toronto, 1948, p. 7.

* Ibid, p. 156.

† V.I. Lenin, Collected Works, Vol. 22, p. 252 (Russian edi

On the whole, Kierstead's theory, like the capitalist theories of the ideologists of imperialism, ignores the laws and the real tendencies in the economic development of capitalism. His political conclusions are just as reactionary as those of any other bourgeois economist who asserts that it is possible with the aid of government regulation to eliminate the "shortcomings" of capitalism. This prophecy distracts the working class from struggle for the revolutionary transformation of society.

Examination of contemporary capitalist theories of economic dynamics shows that the capitalist economists are not attempting a scientific investigation of the laws of the economic development of capitalism, nor a profound analysis of its contradictions, but seek to gloss them over and distort them. Only Marxism-Leninism, which reveals the contradictions and objective economic laws of the development of capitalism, provides a uniquely scientific, uniquely correct explanation and generalization of the processes of capitalist development.

The theory of economic dynamics carries the impress of the deep crisis in modern capitalist political economy. The attempt to find a justification for the internal economic instability that capitalism experiences in our epoch, bears witness to the fact that capitalist political economy is no longer capable of denying the fundamental shortcomings of this system. Called upon to defend capitalism, it is compelled to depart from the old methods of apologetics, and to seek new ones. But these subtleties, too, fail to attain their objectives. Life refutes the theory of economic dynamics as it does all other capitalist theories.

Ya. Kronrod:

Commodity Production Under Socialism

Like other production relations, commodity relations are conditional upon the historically defined nature of property. Therefore, it follows that research into the necessity for commodity production under socialism should include an investigation of the features of property under socialism. There are no differences of opinion among economists about this. But there are great differences of opinion about the question of what features of socialist property make necessary the existence of commodity production.

In recent years great currency has been gained by the view that the presocialist formations of both basic prerequisites of commodity production remain, i.e., not only the division of labor but also the disunity of the producers brought about by property relations with the single difference that in presocialist conditions the disunity of the producers was the result of private property relations and under socialism it is the result of existence of collective farm and cooperative property in addition to national property.

The methodological inconsistency in this view of the necessity of commodity production under socialism is that it is assumed through a mechanical analogy with the presocialist formations that the two forms of socialist property condition the disunity of the producers and that this disunity under the social division of labor gives rise to the necessity of the commodity form of the product.

Actually, although the collective farm and cooperative forms of property set cooperative enterprises apart, public socialist property in the framework of the national economy as a whole by no means separates the producers, but rather, on the contrary, it unites them. National property plays a determining role in the economy. It embraces the means of production, the key for the entire social process of reproduction. It is for this very reason that both the labor of the workers and employees in the state sector of the economy and the labor of the peasants in the collective farm sector function as direct social labor of united producers. Labor under socialism is no longer private. This means that there are no contradictions between private and social labor, which, under a private property system, leads to commodity production which is the form of the movement and the resolution of this contradiction.

The concept of collective farm and cooperative property as the main and even the only cause of commodity production is wrong exactly because the stress is on one factor — isolation of collective farm enterprises — while another and decisive factor in socialist production relations — the unity of all producers and all enterprises in national property — is ignored.

In view of the notorious weakness of this theoretical structure (two forms of property, isolation of producers, commodity production), some economists attempt to strengthen it by denying openly or covertly the direct social nature of labor under socialism.

A strange theory has gained some currency in the literature according to which the labor of workers in state enterprises is of a directly social nature only within the state sector of production and that collective farmers' labor has a direct social character only within the collective farm. This point of view has no basis. The direct social characte of labor is expressed by the fact that labor becomes collective in the whole social process of reproduction. Therefor limiting direct social labor to the collective farm or to the state sector of the economy is, essentially, a negation of this nature of socialist labor. At the same time, the direct social nature of socialist labor is the basic feature which differentiates it from labor under private property conditio In the direct social nature of labor is expressed that qualit which lies at the basis of the planned character of socialis production. The negation of the direct social nature of labo is equivalent to the negation of the planned character of the development of production under socialism.

Thus the development of the socialist economy has created a situation which classic Marxist writers could no have foreseen: in spite of the fact that the socialist collectivization of production has taken place and in spite of the fact that labor has become directly social, commodity production and exchange have been retained.

Why are commodity relations immanent to the socialist economy? An explanation of this problem requires that the two following problems be considered: 1) Why must produ of labor be produced for exchange under socialism? 2) Wh is this exchange carried on in the form of commodity exchange? In investigating these questions, one must first take as one's point of departure the features of the public form of socialist property insofar as it basically determin the system of socialist production relations, including commodity relations.(1)

At the socialist stage of the development of productive forces, public property determines the first stage of the directly social nature of labor. At this stage labor is characterized by an absence of social homogeneity (manua and mental labor, skilled and unskilled labor, complex and simple labor, heavy and light labor, etc.) because of the actual inequality of the working people in the social proces of production. This inequality in the process of socialist production and the socially unequal value of labor create o the basis of socialist property the objective necessity for economic relations that can assure universal participation in labor, that will exclude the possibility of one person passing his share of labor to others and that will give material stimulus for the most productive work on the part o each worker and collective. But the necessity of such relations means nothing else than the direct, equivalent dependence between what is obtained from the results of social production and what is put into the results of production. In other words, it is the necessity of equivalent relations through which the process of reproduction is realized. Th relations, conditioned by the peculiarities of national socia ist property, appear in two specifically historical traits o the latter.

In the first place, public socialist property is the relationship between all producers in relation to the means of production, in which the means of production as the prope of society function in enterprises run for the entire societ in a special economic form in which the goods produced a placed at the disposal of the enterprises and serve as a source for forming a fund for compensating it for expense of production and a fund of surplus product. This means that the means of production in each enterprise are eleme of socialist property, that they systematically function precisely within the enterprise's economic sphere and that they are reproduced from the resources of the enterprise.

In the second place, public socialist property is a relation between producers in relation to the means of production, in which the inclusion of each single working person in the labor process, proceeding at society's expense on the basis of the means of production belonging to it, must be connected with equivalent relations between society and individual workers. However, these relations are set up in a special economic form when the labor expended at an enterprise is paid for from the resources reproduced by that enterprise.

Both these features of public socialist property determine the economic independence of socialist enterprises in accordance with which the relations between them and also between enterprises and workers are carried out on the basis of an equivalent compensation of expenditures. Hence the objective necessity of production for exchange, because the direct equivalent compensation of expenditures is possible only in the form of exchanging the products of labor.

But why does the exchange between socialist enterprises have a commodity form? Why are products produced and exchanged as goods even though they are products of direct social labor?

The need to make products for exchange on the basis of equivalent compensation inevitably gives rise to and develops an internal, nonantagonistic, but very important contradiction in direct social labor; a contradiction between the total social labor expended in the production of the social product as a whole and the individual and collective labor expended in the production of the products of individual socialist enterprises.

Like the labor materialized in the aggregate product, all social labor and all parts of it embodied in the individual consumption values represent socially equalized, directly social labor. The socially heterogeneous labor that has been expended in production is transformed in the social product as a whole and in its separate parts. Social labor as a whole and its separate parts are the embodiment of equal social labor equally necessary for the society.

Individual and collective labor, embodied in the product of each enterprise, is a variety of socially heterogeneous labor or a combination of several types of socially heterogeneous labor. Therefore, though it is still directly social labor it is not socially equalized collective labor. The degree of its necessity for society varies.

Thus the contradiction in directly social labor under socialism consists in the fact that, as the aggregate labor expended for the aggregate social product, it acts as universal equalized, average labor, and as the individual nd collective labor expended for the product of a given enterprise it acts as special socially heterogeneous labor. In order that the product enter economic turnover and be exchanged for other products, it must be the embodiment of both directly social labor and universal, average labor, which is equally necessary for society. However, as the product of socially heterogeneous labor, i.e., labor that is not universal and average, the expenditure of which is necessary in equal degree to society, it cannot enter directly into economic turnover. Consequently, the above-mentioned contradiction consists of the fact that each product is, on the one hand, the embodiment of directly social labor and must possess direct exchangeability, and, on the other hand, it is the product of socially heterogeneous labor and does not possess this exchangeability.

This nonantagonistic contradiction characteristic of directly social labor during the first — socialist — stage of development under conditions in which equivalent compensation of labor expenditures is necessary, gives rise to products being produced and exchanged as commodities. The production, equalization and exchange of products as commodities, i.e., as values, serves as a means of resolving the above-mentioned contradiction. In this process socially heterogeneous, unequal labor, possessing various degrees of necessity for society, is reduced to socially equalized, average social labor.(2)

So commodity production is immanent to socialist production relations. It is not introduced from the outside and does not result from the "underdeveloped character" of relations under socialism. Commodity production is inherently characteristic of highly developed, consistently socialist relations of production. It is rooted in the historical features of public social property, which condition the necessity of exchange and the necessity to exchange products as commodities as a result of the contradiction arising from production for exchange in directly social but socially heterogeneous labor.

All this does not mean that kolkhoz property is not connected with the necessity of commodity production. This form of property is one of the factors determining the social heterogeneity of labor (the labor of the kolkhoz farmers is different from the labor of workers and office workers). The existence of kolkhoz and cooperative property also acts as an independent cause of equivalent exchange. The kolkhozs produce products as proprietors and sell them in order to obtain goods from the state production sector in exchange. The existence of cooperative and kolkhoz property in addition to public property at the stage of socialism also gives rise to a contradiction in directly social labor: a contradiction between the aggregate labor of society and the labor expended in each kolkhoz enterprise. Because of this, kolkhoz-cooperative property, in the economic conditions determined by state property and giving rise to commodity relations, acts as an additional factor in creating the necessity for these commodity relations under socialism.

Let us emphasize that the existence of kolkhoz and cooperative property is only a supplementary reason for the existence of commodity production beside the main cause, which is generally true for all socialist countries — namely the peculiarity of public socialist property. Commodity production will remain as long as social property continues to be socialist property, i.e., throughout the entire socialist phase.

The explanation of the necessity of commodity production mainly or only by the existence of kolkhoz property leads to a number of serious errors.

In the first place, under this premise, commodity production within the decisive sphere of the socialist national economy (the state sector) is inevitably treated not as a form of production immanent to this sector, but as something introduced from outside it. Therefore, the conclusion is that the commodity form of the product circulating in the state production sphere is considered to have no real economic content and this means the negation of the commodity nature of the means of production(3) and, consequently, of the action of the law of value in state socialist production.

In the second place, the necessity of commodity relations to the extent that they are recognized in the framework of the state economy, is related (this is especially noticeable in the concept defended by I. A. Anchishkin, M. F. Makarova and others) not with the internal features of consistently socialist production relations but rather with the exchange between the two sectors. As a result it is not that the necessity of exchange follows from the features of the socialist production system based on public property, but, on the contrary, these features and the commodity production they give rise to follow from exchange. In other words, the primacy of exchange is being advocated implicitly in this view.

In the third place, the concept which recognizes as commodity production only that part of production which is exchanged between various proprietors (state and kolkhoz sectors) and denies the commodity nature of that part of production, the products of which do not enter into that kind of exchange, this concept breaks up the unity of the process of socialist reproduction. It ignores the fact that the nature of the process of reproduction as a whole is determined by the leading, public form of socialist property.

In the fourth place, this concept emasculates the real content of the value relations and forms under socialism (goods, value, exchange value, trade, money, prices, credit, finance, etc.) and may lead to an underestimation of the use of the law of value and value levers in economic practice. Thus it is in direct contradiction to the pressing needs to strengthen socialist management methods.

It should be said that the concept we are considering shares the main shortcomings of old and, apparently, discredited views of the "accounting" and "distribution" versions of the theory concerning the necessity of commodity production. According to the "accounting" version, commodity production and the law of value are necessary under socialism because the social heterogeneity of labor still does not allow us to compute directly labor in units of working time while socialism requires a social accounting of labor. Commercial commodity production was considered by the partisans of this view as an instrument of social accounting of labor, of the reduction of heterogeneous kinds of labor to a "common denominator." According to the "distribution" version, the need for commodity production and the law of value are connected with the distribution by labor, which was possible only if there were a uniform method of social accounting for labor expended. But as labor under socialism is socially heterogeneous and therefore cannot be computed directly in working time they draw a conclusion about the need for commodity production as an instrument serving the needs of labor accounting. This version is a particular case of the "accounting" view.

These views are mistaken because they consider commodity production not as a form of production relations but as some sort of technical accounting instrument. However, it is clear that it is not the material or value form of social accounting of labor which brings commodity production into being. On the contrary, the existence of commodity production leads to the necessity of the value form of labor accounting.

The flaws in the "accounting" and "distribution" versions are, in the main, reproduced in the concept that connects the necessity of commodity production under socialism only with the existence of the kolkhoz-cooperative form of property. Really, according to this concept, the forms of commodity and value in the production of the means of production are treated only as accounting forms; as forms needed for cost accounting or for "payments for labor," etc. The causes of the action of the law of value in the state socialist production sector are seen not in the fact that the product of this sector is a commodity but in the fact that the manual and office workers receive wages needed to obtain goods. Thus the form of distribution is seen as the cause of the use of commodity forms in production.

Life is demonstrating more and more the bankruptcy of explaining the need for commodity production by the mutual ties between kolkhoz property and state property.

Hence the attempts to improve this concept. K. V. Ostrovityanov,
first, proposed that in the analysis of this probl
"one should keep in mind the aggregate of relations of ow
ship of the means of production and of the products of lab
in socialist society and, above all, the relations between
two forms of socialist property, i.e., state and kolkhoz-c
operative property." Second, he recognized that commod
relations within the framework of the state production se
tor are determined not only by the interconnections of th
two forms of property but also stem from "the peculiarit
and internal needs of the development of state property i
self at the stage of socialism."(4) The postulate that the
for commodity production is connected with the needs in
development of the state form of property is correct. Ho
ever, from the methodological point of view one cannot
agree with the form in which Comrade Ostrovityanov has
developed it. Indeed, if commodity relations are characte
istic of the state socialist form of property, it then follov
that this form of property itself, as the leading form, als
determines the main reason for preserving commodity p
duction under socialism. Therefore, if one recognizes th
commodity relations are characteristic of state property
itself and, if, at the same time, one puts forward the thes
that the need for commodity production has its roots firs
of all in the interconnection of the two forms of property,
one is taking a dualistic position from the methodological
point of view.

In addition, in making his specific analysis of the probl
of the necessity of commodity production, K. V. Ostrovit
practically destroys the thesis according to which the co
modity nature of the means of production follows from th
peculiarities and inner requirements of the development
state property itself. In considering the commodity form
a product in the state sector of the economy, he is alread
assuming commodity-money relations existing in the eco
omy and arising outside this sector. "The equivalent con
pensation paid to enterprises for expenditures of living a
embodied labor," writes Academician K. V. Ostrovityano
of state enterprises, "is inevitably realized through commodity
exchange under conditions of commodity producti
and circulation."(5)

The demonstration of the decisive reason for the inevi
bility of commodity production under socialism, — i.e.,
peculiarities of public property — makes it possible, in
opinion, to determine the real place of commodity produc
tion in the socialist economic system and the content of
value relations and forms under socialism. This corres
to the fullest planned use of value relations in the interes
of the development of the socialist economy.

*The Basic Features of Commodity Production Under
Socialism.* V. I. Lenin wrote that the production of goods
is a system of social relations. Under socialism commo
ity production is based on collective socialist property.
this it differs radically from all presocialist types of co
modity production and is a special kind of commodity
production.

Since commodity relations are inherent in the socialis
economy and embrace the entire sphere of the economy,
elements of the social product — the means of productio
and consumption goods (with the exception of the articles
consumed directly on the collective farms and subsidiar
farms of the people) — are produced and pass through
economic circulation as commodities. Socialist producti
as a whole is an historically special type of commodity
production. As such it is a special type of commodity pr
duction and is characterized by a number of basic featur
Among the most important of these are the following:
a) the sphere of commodity production is limited by the

social product, while the productive forces — both the material elements (the basic land fund) and the human element (manpower) — are not commodities; b) the function of the sphere of commodity production is to be seen in the fact that commodity relations serve as a supplementary, auxiliary form of the connection between socialist producers alongside the direct connection between socialist producers and brought about through their association on the scale of the national economy by public socialist property; c) the mechanism of the functioning of commodity production is the planned economic interconnections of the socialist producers in the production and economic circulation of commodities; d) the results of the functioning of commodity production serve the reproduction of socialist production relations.

Let us consider separately each of these specific features of commodity production under socialism.

The sphere of commodity production of a special type. Under commodity capitalist production the functioning material elements of the productive forces (factories, land, etc.) as well as labor power are commodities to the same degree as the social product. In this sense the sphere of capitalist commodity production is all-encompassing. Under socialism, when producers are united by relationships of public socialist property, labor power is not a commodity. The material elements in the functioning productive forces (the funds of socialist enterprises and land) are not commodities either. In this sense the sphere of socialist commodity production is limited.

The impossibility of transforming funds or land or, in a word, all functioning material elements of the productive forces, into commodities under socialism bears no relation whatever to the fact that they go through their turnover within the framework of public property. Their noncommodity nature follows from the economic form in which they make this turnover. They are not bought or sold and in this lies the distinction between the turnover of material elements of the productive forces and the economic turnover of all elements of the social product.

The socialist nature of commodity production, and, specifically, the narrow limits of its sphere, exclude the possibility of developing commodity relations as relations based on exploitation.

Other principal features of the sphere of commodity production under socialism also are essential. In production, commodity relations are basically relations between socialist producers, namely, between state and kolkhoz-cooperative enterprises. Relations, serving under socialism the connection of production with consumption, are formed as commodity relations between the socialist producers and the consumers in which the incomes of the latter are formed in socialist production. Only a relatively insignificant part of the sphere of commodity exchange serves the relations between the various groups of the population in the buying and selling of products of subsidiary farms.

Thus socialist commodity production is made up of four fields: a) commodity relations within the framework of the public form of property (the exchange of the means of production and of consumption goods); b) commodity relations within the framework of state and kolkhoz-cooperative forms of property (the exchange of the mean of production and, to some extent, of consumption goods); c) commodity relations serving the transfer of consumption goods from collective socialist property (in its two forms) into personal property; d) commodity relations governing the movement of consumption goods within the framework of personal property (from the private subsidiary farms to the consumers). Each of these fields of commodity production and circulation has its own important peculiarities.

Within the state sector of the national economy commodity production and exchange of the means of production (tools of labor, raw materials, materials, etc.) is carried out between state producer enterprises and consumer enterprises and the commodity production and exchange of consumption goods is carried out between producer enterprises and enterprises in the wholesale and retail trade. The feature of this field of commodity relations is that when a commodity passes from the seller to the buyer the property relations are not changed. Commodity circulation is here a metamorphosis of value serving the movement of consumer value between economically independent state enterprises.

But why is a product a commodity if it does not change proprietors in economic exchange?

The common definition of a commodity as a product whose seller loses the right to it as property and whose buyer becomes its proprietor when buying and selling takes place, is quite satisfactory for commodity relations based on private property. But in this case too it fails to reveal the economic content of the category "commodity" and simply expresses the rights involved in commodity relations.

The definition of a category "commodity" which expresses the economic content of commodity relations is given in "Capital:" "In order to produce a commodity, he (the producer. — Ya. K.) must produce not just a consumer value but a consumer value for others; a social consumer value." We know that Engels added to this definition: "And not only for others in general... In order to become a commodity, a product must be placed in the hands of a person whom it will serve through exchange as consumer value."(6)

This addition is extremely important. It would seem that in making it, Engels might have made use of Marx' famous thesis: "In order that given things be related to each other as commodities, those who own them must bear to each other relations of persons who can dispose of these things at will... They must recognize each other as owners."(7) However, Marx emphasized that the fact that they see each other as owners is a volitional, juridical relationship, the content of which is given by "the economic relationship itself." Engels expanded the definition of a commodity with a formula reflecting the very essence of economic relations expressed in a commodity and this definition is that a commodity is that product which reaches the consumer from the producer through exchange, that is, on the basis of the equivalent compensation of the seller by the buyer for the labor contained in that product.(8)

Under socialism a product becomes a commodity when it goes through economic turnover on the basis of equivalent compensation for the labor contained in it. When equivalent compensation is carried out by various owners through exchange there is expressed a change of property in the commodity. When it is carried out by enterprises united by one form of property, exchange only expresses the movement of property between various economically independent links of the division of labor (enterprises) without a change of proprietor.(9)

Under socialism the movement of property in exchange proceeds as the movement of consumer value.(10) The important thing about this is that the real exchange of things proceeds in the form of direct equivalent compensation for the expenditures made for exchanging products of labor.

Thus whether or not proprietors change in exchange (as, for example, in exchange between state enterprises) exchange in a socialist economy is the movement of property, is the exchange of things in the process of reproduction based on the equivalent compensation of the exchanging products, i.e., commodities. This is the importance of exchange as a form of economic ties in socialist society and its content as a specific social production relation.

Commodity circulation between enterprises which are in the public property sphere is the highest socialist development of commodity relations. Production, marketing and supply turnover in the state sector of the economy (the exchange of the means of production between state enterprises) the wholesale deliveries of consumption goods into the trade network (wholesale and retail) are the main commodity currents in this field of commodity circulation. They are realized in changing, specific forms (centralized distribution, funding, decentralized procurements, direct contractual commodity deliveries on the basis of buying and selling, etc.) but as the most fully developed socialist commodity relations they are also the relations based to the fullest extent on planning.

Commodity relations between state and kolkhoz-cooperative enterprises implement the delivery to the kolkhozs of the means of production, and, to some extent, manufactured goods as well. Kolkhozs deliver raw materials and foodstuffs to state industrial and trade enterprises. These commodity relations serve the economic ties between city and country and between the working class and the peasantry. Insofar as commodity relations between state and kolkhoz enterprises link enterprises of the two forms of property, they are based on a smaller degree of collectivization of production relations than relations taking place exclusively within the framework of public property. Therefore in this case, first, there is a smaller element of the planned character of commodity relations than in the first field and because of this, special forms for organizing them are needed (planning of the kolkhozs' commodity production that is bought by the state, contracting, etc.). Second, these relations show the interconnection with the unorganized market (the movement of price levels). Third, the observance of the law of value in the field of commodity circulation is of especially great importance for uninterrupted flow in the reproduction process.

In commodity relations between socialist enterprises and consumers the contractors in buying and selling transactions are, on the one hand, the enterprises and, on the other, tens of millions of consumers. Individual purchases made by the latter are subjected only to an indirect control through the planned fixing of income levels, influence on demand on the part of production and taking into consideration the consumers' demand. The given field of commodity relations is closely connected with the relations on the unorganized market. It exerts a determining influence on the latter and itself is influenced by it in turn.

Thus the planned character of commodity relations linking socialist enterprises and the population, i.e., the spheres of social and private property, is developed to a lesser extent than in the first two fields of these relations.

Finally, the fourth field of commodity relations are those relations linking the subsidiary farms of the population (and also, to some extent, the kolkhozs with the consumers). In these relations realized through the kolkhoz market there is a considerable element of the free market. It is possible to influence the unorganized market through indirect measures of economic control.

Thus the specific features of this special type of commodity relations are the following: a) this sphere is limited by the social product reproduced in the form of the aggregate of goods; b) this sphere is divided into four parts each of which has its own type of commodity production and circulation and a different degree of planned character of commodity relations.

Functions of the Special Type of Commodity Production.— The commodity form of socialist production represents a material and indirect form of economic tie. However, because of the fact that under socialism there is a special of commodity production, the material form is no longer either the only or basic form of this tie. The production the scale of the entire socialist national economy is unite by social property. This means that there is a direct immediate tie between enterprises. This tie consists first all of the fact that the means for forming socialist enterprises or expanding them (new construction or capital re construction) are not obtained through commodity exchan but through the direct planning of the distribution of a single state fund on the scale of the whole state. Existing enterprises do not move from one link of the social division of labor to another through commodity exchange eith They do so on the principles of direct distribution. Furth since manpower is not a commodity it does not enter the production process through commodity exchange but rath through the direct planning of and payment for labor. Th current reproduction of the social product — the distribu tion of material means and the use of produced means o production and consumption goods — proceeds in a commodity form. However, in this case, commodity exchang is only the means of expressing the proportions in the di tribution of the product that were established earlier in t plan. What function does the commodity form have as a form of material, indirect tie between the producers of goods in socialist production in which the planning tie between the links of the social division of labor has arisen, developed and become the basic and decisive tie?

It is a dual function.

Because production under socialism is collectivized, t direct economic planning tie between producers has alre been formed. However, because socialist production is carried out by enterprises that make equivalent exchang among themselves and in which labor is characterized by internal contradiction, it is still necessary to use a mate indirect tie between producers. This indirect kind of tie supplements the direct tie. Its function is to give materi stimulus to production and to control its relations to the needs of society by offering equivalent compensation for expenditures. In conditions where there exists a direct planned form of economic tie between producers, the co modity form no longer regulates the proportions of repr duction. The proportions are directly regulated by socie in a planned way according to the requirements of the ec nomic laws of socialism. However if the proportions in production are disrupted, they will be reflected in commodity and value disproportions which, objectively, requ elimination as soon as they appear.

The commodity form also has another important funct in the national economy. Although it is neither the only n the basic form of economic tie, yet it is a universal form in which direct planned economic ties and proper materi economic ties are realized. The planned distribution of means of production for new construction and in the proc of current reproduction and payment for labor are proce that follow not from the material or direct form of labor but are implemented by value relations. They are not fo mally but actually brought about by the processes of produ tion and the exchange of commodities.

Commodity relations are the only form of economic ti in the field of the exchange of the products from the population's subsidiary farms. Since it has no basis in a direct, planned economic tie the commodity form in this case has a certain aspect of a free market as we have n

Thus commodity production of a special type has a ver important place in the system of socialist production rel tions. Since it is a supplementary, auxiliary form of eco nomic tie between producers, existing alongside the mai tie between them — the planned distribution of productive forces and the reproduced product—and since through it comes this direct commodity form, it is: a) the form of economic tie between the socialist enterprises of the state and kolkhoz-cooperative sectors; b) the form of the economic tie between production and consumption; c) a form of economic tie serving the entire complex process of distribution and redistribution of the national income and of the funds in the national economy which were accumulated earlier and are used now.

The machinery of the functioning of the special type of commodity production consists of the planned production of goods and their economic circulation, implemented by planned price formation, credit and currency circulation and also state centralized distribution and redistribution of the means and income of the national economy.

The features of the machinery for the functioning of the special type commodity reproduction appear first of all in the fact that production is done by enterprises run on a cost accounting basis. The compensation of expenditures through income serves the entire reproduction process and gives incentive to the growth of production, to the increase of labor productivity, to the reduction of cost, etc.

The planned exchange of goods (supply, marketing, procurements, wholesale trade and various forms of the retail trade) act as a necessary element in the machinery of the functioning of the special type of commodity production. The entire complex of commodity ties between production links and between production and consumption is a distinct planned economic form of the exchange of activities in socialist society.

In all their forms (except that of the kolkhoz market) commodity production and exchange are implemented by planned price formation under socialism. Wholesale prices for goods produced by the state, prices for agricultural raw materials and foodstuffs, retail prices in state and cooperative trade, etc., are a single interconnected planned system of prices serving the needs of the turnover of the means of production and consumption goods. Socialist production is served by planned monetary circulation, credit and the financial distribution and redistribution of means.

The results of the functioning of the special type of commodity production. Since commodity relations are immanent to socialist production, they are developed as socialism is developed and they serve the expanded reproduction of socialist production relations. Further collectivization of labor, the development of ties between the state and kolkhoz-cooperative sectors of the economy and the gradual raising of the level of the socialist maturity of the latter—all this inevitably leads to the development of commodity relations rather than to their curtailment.

The measures taken by the Party and the government in recent years confirm this conclusion. The creation of the economic councils and the extension of the rights of enterprises have resulted in the development of direct commodity ties between all links of the socialist division of labor. Machines are being drawn into the sphere of the commodity relations between the socialist industry and agriculture as a result of the reorganization of the MTS. The extent to which farm products are commodities is growing steadily because the collective farms are using smaller and smaller amounts of them in internal exchange. At state enterprises, because of the increase in specialization and the development of cooperation, the consumption of elements of production made by the enterprises themselves is giving way more and more to the use of raw materials, materials, and semifinished goods obtained from outside on a commodity basis. Socialist commodity production, serving the process of expanded reproduction, is developing and becoming stronger along with all the rest of the national economy. But as it develops it is gradually aiding in the formation of those forms of economy which will make commodity relations superfluous in the transition to the developed communist economy.

The historical tendency of the special type of commodity production is to prepare the conditions for its own decline because it is a factor in the construction of communism, because it develops during this construction and because it serves the expanded reproduction of the production relations of socialism(11) and their gradual transformation into the relations of communism.

On the Categories of the Special Type of Commodity Production.—The special nature of commodity production under socialism leaves its marks on all categories of the commodity economy. Let us consider the more important features of these categories.

Experience has shown that a commodity is the economic form of a product of labor adequate not only to private, independent work and that this form also suffices to the new content, i.e., socialistically combined work.

The product of an economically independent socialist enterprise that enters the sphere of consumption through exchange is a commodity. However, the product becomes a commodity not because it enters into exchange. It is produced and exchanged as a commodity because a certain production relation is embodied in it.

The commodity as a thing serving satisfaction of some need is a consumption value. Consumption values are produced under socialism in order to satisfy social and personal needs mutually tied in a planned system. Consequently, they act as directly social consumption values and, as such, they form the basis for new definitions of social labor. Socialism is necessarily based on the planned combination of useful work in the social system. Systematic and planned distribution of labor is the basis of the directly social nature of concrete labor. Thus socialist property puts the stamp of historical determinism on concrete labor. Individual concrete labor based on social property is not private labor. However, one of the basic features of directly social labor under socialism is that it is realized at economically independent socialist enterprises which send out their products for social consumption according to the principles of commodity exchange. Consequently, at the stage of socialism, directly social labor is expressed in consumption value, which is the bearer of value.

What is then the value of a commodity produced under socialism?

Definite masses of directly social labor are embodied in products. However, this fact in itself does not give the labor the form of value. Socialist production is the production of commodities and for this very reason the product becomes the bearer of value and labor becomes its substance. The value of a commodity produced under socialism is a material production relationship i.e., the expression of the social tie between people through things which are the products of labor.

Under socialism labor is not measured by the natural yardstick of labor time. The commodity nature of socialist production determines the expression, commensurability and movement of products as the material masses of social labor contained in them i.e., as values.

Thus it is neither the crystallization of social labor in a product nor the impossibility of measuring it in labor time but rather the realization under socialism of certain production relations in the movement of commodities that presupposes the existence of value as the economic form of these relations. The value of a commodity produced under socialism is a value because, in the first place, it is a form of the indirect, material engagement of individual and collective labor in social labor and, consequently, a form of indirect material expression and movement of directly social labor; in the second place, because commodities are exchanged for each other on the basis of the equivalency of the masses of social labor embodied in them and the distribution of labor between the links of social production proceeds in this special form. The material nature of the engagement of labor elements in the totality of labor, the material nature of the inclusion of individual labor into aggregate labor, the objectivity of the expression of labor as social labor, the movement of labor in this material form and the equivalency of exchange through the masses of labor embodied in commodities give the form of value to the labor embodied in commodities.

At the same time this is value created in commodity production of a special type, in the first place because it is not created by concealed social labor but by direct social labor; in the second place individual and collective labor are included in the social labor not as its opposites (private labor) but rather as the proportion of directly social labor; in the third place, the value expression of labor has a planned nature rather than an elemental one; in the fourth place, value equivalency is realized not in an elemental and anarchic way but in a planned way in accordance with the existing material structure of social reproduction and in accordance with the requirements for the development of socialist society.

All this means that under socialism the form of value does not serve as the main or basic economic tie but rather as a supplementary form of economic tie. Because commodity relations are planned, the anarchic market and the power of things over people are eliminated. At the same time commodity fetishism is eliminated. Under socialism value relations have a rational character.

Like value, a commodity of socialist production is a crystal of abstract labor. The substitution and equalization of commodities in economic circulation is possible only in the form of embodiment of equal amounts of abstract labor. This means that under socialism it is necessary to assume two mutually supplementary forms of ties in individual labor. These are planned ties such as concrete types of labor and planned ties such as abstract types of labor. Consequently, socialist society has already connected the elements of social labor directly as concrete types of labor while, at the same time, under capitalism, these elements are only indirectly connected in the form of abstract labor. But socialist society has still not eliminated the need for a tie between elements of social labor as abstract labor.

The basis of this duality of directly social labor as concrete labor and abstract labor is a nonantagonistic contradiction, characterizing socialist labor, between its form of socially non-homogeneous individual and collective labor, on the one hand, and the form of socially equalized average aggregate social labor, on the other. This contradiction is solved in the commensurability and movement of labor as abstract labor through the commensurability and movement of the products of labor as commodity values.

Abstract labor has certain specific historical characteristics under socialism. It is determined by the relations of collective socialist property which presuppose the existence of economic ties between enterprises on the basis of direct equivalent compensation for labor expenditures. It is an expression of directly social labor and, consequently, a special form of social labor as abstract labor is not contradictory to its content as directly social labor. On the contrary it is adequate to its essence (while under capitalism abstract labor is antagonistically contradictory to concealed social labor). Under socialism, abstract labor serves as supplementary and planned form for combining the work socialist society into a socially interconnected system ex ing alongside the direct combination of specific types of labor in a single social system of work. It is relatively, not antagonistically, contradictory to concrete labor. Thi is expressed in the certain independence of movement of abstract and concrete labor and correspondingly in the in dependence of the movement of value and consumption val

The contradictions characterizing the special type of commodity production, and specifically, the nonantagonist contradictions between consumption value and value, concrete and abstract labor, are noticeable in all economic ties of socialist enterprises: they are noticeable in the fields of the reproduction of production funds, in the field of compensation of expenditures for current production, i the circulation of the reproduced product, etc.

The production funds of state enterprises are the prope of the state. This determines their unity as a social fund for reproduction. In addition the production funds of each state enterprise are attached to it. This means that enter prises have to compensate each other for machines, raw materials, fuel, power, all the tools and means of product they receive on the basis of equivalent compensation to th suppliers for the products received from them. Thus wha is essentially the internally unified state reproduction fun operates in the form of externally relatively detached seg ments, which are attached to individual enterprises. In th there is a certain nonantagonistic contradiction, which co stantly makes itself felt in economic reality. For exampl the production of the tools of labor, raw materials and fu that consumer enterprises need is sometimes accumulate by the producer enterprises because the former cannot fo some reason pay for the production elements they need.

The expenditures of a state enterprise are made by the state as a whole because all its costs are essentially the cost of society's production. However, the enterprise mu compensate for them within the circulation of its own production process. Therefore public expenses operate a the expenses of individual enterprises. In this, too, there is a relative contradiction, which comes to the fore in the socialist economy. For example, if an enterprise incurs above-plan expenditures it becomes one of the losing ente prises. This contradiction, too, is resolved through the system of plan measures directed toward improving the work of enterprises, toward reducing expenditures and eliminating losses.

The product of each individual enterprise is a part of t total social product. The state disposes of it directly. It plans its use and distributes it. At the same time the pro of each individual enterprise enters circulation in the national economy on the basis of its compensation alone. Consequently, individual parts of the internally unified to social product are isolated in the form of products of ind vidual enterprises. In this there is a certain contradictio which arises and is resolved constantly in the socialist economy.

For example, the realization of commodities requires that they be produced and delivered to consumers in accordance with the requirements of society. If these condi tions are not met the commodity will not be realized fully The funds expended by enterprises are connected with commodity reserves that have not been realized.

Under socialism the social usefulness of a product is termined by the socialist, planned nature of its productio Therefore the process of exchange or the process of realization is not a process of social recognition of the commodity in general. It is a process for checking to se hether the consumption value of a commodity suffices to he social demand or not and whether the labor embodied in has been expended fully as social labor and according to he socially necessary norms.

Thus, socialist production relations, which require commodity production, also require the use of value forms as orms of the planned distribution of labor, subordinated at ach given moment to the interconnected system of social emands, and sufficient to the level of the development of roductive forces and production relations in socialist ociety that have been achieved. Commodity relations are sed by the state to achieve the optimum distribution of embodied and living labor in the process of reproduction and or stimulating the greatest efficiency in socialist production, an increase in labor productivity and reduction in costs.

Of course this result is not obtained automatically and in n elemental fashion. Quite the contrary. Because of the ery nature of socialist commodity production its function the process of reproduction is utilized according to a lan. The special type of commodity production and the orms of it therefore act as one of the tools for the planned evelopment of the socialist economy.

FOOTNOTES

(1) K. V. Ostrovityanov states that it would be incorrect to nfer the need for commodity and currency relations nainly from the features of state socialist property. He otes that one must consider "first of all, the relations between two forms of socialist property" (Kommunist, No. 3, 1957, p. 94), and that state property is the closest to he future, communist form of property and in its development it inevitably gives rise to a tendency for the commodity o decline (p. 93). Doubtless, the development of public ocialist property lays the groundwork for the future decline f commodity relations, but this cannot serve as an argument against our postulate that it is in its very features hat the need for commodity and currency relations under ocialism lies. The refusal to see in national property — the eading determinant form of socialist property — the need or commodity relations signifies a refusal to recognize hese relations as integrally necessary to socialism. In his event, commodity relations are inevitably treated as hough they had been applied to socialism from the outside.

(2) In his article "The Argument About the Commodity," the olish economist St. Albinowsky writes the following about ur proposed explanation for the need for commodity production: "If I have understood Kronrod correctly, the differentiation in social labor is the distinction between its complexity, intensiveness and nature. If things were the way ronrod says they are, commodity production would be ecessary throughout man's existence." (Polityka, No. 10, arch, 8, 1958.) This criticism has no basis. In our view is not some distinctions in social labor that are the cause r commodity production, but rather its social differentiation, which leads to the need for equivalent exchange in the roducts of labor and to nonantagonistic contradictions in ocial labor. This differentiation of labor is an integral rt of socialism. It will be eliminated during the transition the second phase of communism.

(3) I. A. Anchishkin makes the assumption that the need for mmodity production is connected only with two forms of operty, and writes: "In socialist society all the incalculable variety of the products of labor reflect highly comex transitions from commodity to a product with no comodity characteristics... The products of labor produced socialist enterprises as a whole are divided into two oups: products which have ceased to be commodities and products which are commodities... The means of production produced in state enterprises are not commodities in that they are not sold but distributed." (Scientific Works of the MGEI [Moscow State Economics Institute] No. 10, 1957, pp. 159-160.)

(4) Kommunist, No. 13, 1957, pp. 94, 92.

(5) Ibid., p. 93. (Emphasis is mine. — Ya. K.)

(6) K. Marx, "Capital," Vol. I, 1954, p. 47.

(7) Ibid., p. 91.

(8) Exchange in general, by which is meant the exchange of substances between the links of social production, is an eternal phenomenon. But when exchange proceeds on the basis of direct equivalent compensation between the exchanging links for the products of labor, the special historical form of exchange — the commodity form — is in evidence.

(9) Nevertheless, exchange in socialist society cannot be considered exchange in the political and economic sense if there is no change in the form of property in the exchange. Of course, if one understands exchange to be only the movement of private property, or the exchange of commodities between individual proprietors, there is no exchange on the basis of public property. However, the mechanical analogy with capitalism is not suitable for an analysis of the relations under socialism including commodity relations.

(10) "What is taken away in usual selling? Not the value of the commodity sold because it only changes its form... What is really taken away from the seller and what enters the buyer's sphere of individual or productive consumption is the use value of the commodity, i.e., the commodity as a consumption value." (K. Marx, Capital, Vol. III, 1954, p. 363.)

(11) Therefore it is incorrect to say that, in its development, state property gives rise to "a tendency for the commodity to decline," or that the period of gradual transition from socialism to communism is characterized by a gradual "dying out" or "narrowing" of commodity production.

I. Kasitsky:

Once More About Textbooks On Industrial Economics

The account of the conferences for the discussion of textbooks on the economics of industry, published in Voprosi Ekonomiki, No. 7, by no means exhausts their evaluation. The speeches of the conference participants has failed to touch on a whole series of important questions. We will attempt to examine a few of these questions. First of all, there is no doubt but that the release to the public of both textbooks is an important event in the science of economics and especially in the area of the so-called concrete disciplines of economics. The latest edition of the textbook on the economics of industry relates to pre-war times. The fact itself that two works on the same subject matter have been given their imprimatur as textbooks, imposes an obligation on both the writers and the publishers. Because of this, heightened demands must be placed on these two books. To begin with, a textbook must teach something; secondly, it must contain its own specific material and not duplicate material from contiguous disciplines and fields; and, thirdly, not only generalize theory from practice and ensure an organic relationship between science and living, but also help to advance its field in actual practice.

It must, however, be mentioned that these demands on the published textbooks on the economics of industry must to a certain extent be "toned down." The point is that a textbook to some extent reflects the state, the degree of maturity of the science with which it deals. Unfortunately, research work in the concrete disciplines of economics, and even in such an important discipline as the economics of industry, continues to lag behind the needs of the day. In the various research institutes, problems of the economics of industry are treated mostly from the narrow, parochial viewpoint of the specific field of the researchers concerned. Work on the economics of industry is weakly organized at most VUZes [VUZ — institute of higher education, college. Transl.]. A study of the research and learned journals of VUZes shows that they here and again print extremely interesting and valuable papers, but these occur fortuitously, leaving unanswered a whole series of questions that arise in courses on the economics of industry and are provided for in the schedules of these courses.

In spite of the acute need for one, no research institute has as yet been set up to deal with problems of the economics of industrial production, although many speeches and proposals have been made advocating this. As we know, such institutes have been organized in other fields of material production: agriculture, transport, construction.

As a result of the lag in research work in the field of industrial economics, the view has arisen that only political economy can be concerned with the economics of industry and that there is no such thing as a theory of the economics of industry, of enterprises or of any other concrete discipline. Unfortunately, there is as yet no unanimity of opinion on what a course in industrial economics should contain, nor on the methods or sequence in which such a course should be taught.

Thus, in writing their textbooks on industrial economics, the authors have had virtually no adequate theoretical material on which to base their work. They have been able to avail themselves of research done at VUZes of economics and the experience of these schools in teaching the course, and also of published literature, including a few pre-war textbooks. The job of the authors has also been rendered difficult by the limitations of published statistical material. Much of the content of the textbooks is based on published materials and does not derive from data obtained directly from industrial practice. All of these considerations have to be taken into account in any over-all evaluation of the two textbooks. And, from this point of view, the work of the authors merits a favorable response. The authors have done a great job. They have endeavored to formulate fundamentals and to systematize (here more, there less successfully) all the wealth of accumulated material. Both textbooks may be regarded as basic to the composition of high-quality textbooks. At the same time, the textbooks are guilty of a number of grave omissions. Much intensive work will have to be done if they are to be brought up to modern textbook standards, especially in view of recent changes in industrial management.

***

What problems should be solved by the new textbooks? This article does not deal with the problem of the subject matter and methods of the economics of socialist industrial production. This science is still in its early stage. But it is extremely important to deal with the question of the content of a course in industrial economics as an academic discipline taught in VUZes of economics. Both textbooks deal with this question. However, whereas the MGEI (Moscow State Institute of Economics) textbook makes an attempt to determine the content of the course, the textbook of the Institute of Economics of the Academy of Sciences of the USSR has, as a matter of fact, extensivel annotated the problems it deals with.

Common to both textbooks is the starting position that the course studies the effects on industry of the economi laws of socialism.

It is worth mentioning that our economic literature ha yet only weakly elaborated on the operation of economic laws. And textbooks on industrial economics are not fre this deficiency. Both textbooks essentially fail to show concrete ways in which these laws operate in industry. Thus, in the textbook of the Economics Institute of the Academy of Sciences of the USSR, for example, it is quit correctly asserted in a chapter on socialist industrial pl ning that "planning in the USSR has been built on solid scientific foundations, it is based on the Marxist-Leninis theory of expanded re-production and on the knowledge a turning to account of the economic laws of socialism" (page 73). Further (under various chapters) there follow description of the forms and content of our plans, of the indices for determining their progress and of the metho by which they are drawn up. It must not, however, be su posed that this represents the total area of operation of law of proportional development according to plan.

In the MGEI textbook, the section on the content and in ternal sequence of the plan for the development of indust production has turned out to have been placed in the cha ter on the organization of industrial management; beside the textbook contains a separate chapter on the working of industrial production schedules and (as also in the textb of the Economics Institute of the Academy of Sciences of the USSR) sections on developmental planning for new te niques, labor, cost prices, etc. Without touching on the methodological expediency of such an arrangement and presentation of material on planning, it must be remark that these sections describe an operative planning syste and give unquestionably useful information on the metho arriving at basic plan indices and their content. But the not only fail to show the operation of the law of proporti development according to plan — they even omit mentio ing it altogether. Thus, the goal of showing how economi laws operate in industry remains as yet unachieved.

That the authors lack a sufficiently clear and accurate idea of what a course in the economics of industry shoul contain, may be substantiated by the following: The MGE textbook states that "the economics of socialist industry studies the ways in which the objective economic laws o socialism operate in industry, how industry develops, c crete methods for reaching economic-political objective established by the Communist Party and the Soviet gove ment for industry at various stages in the construction Communist society, the methodology and procedures of planning and economic grounding of technological and or ganizational measures in industrial production" (page 1 Thus, in essence, the course has five basic objectives.

It has already been mentioned above that the authors have not fully succeeded in showing the ways in which e nomic laws of socialism operate in industry. From the definition introduced above it follows that the economics of industry also studies the development of industry. Th MGEI textbook devotes a special chapter, "Basic Stages the Development of Industry in the USSR," to this subjec But it is a descriptive chapter which to a certain extent repeats familiar theses from other historical discipline and can hardly be said to have accomplished one of the tasks of a course in industrial economics.

In our view, the assertion that a course in the econom of industry studies "concrete methods for reaching econ ic-political objectives" must be regarded as correct. B is purpose of the course is regarded as not merely hisorical in nature, then its fulfillment has remained quite ncomplete. Both textbooks describe how specific objectives ave been reached at various developmental stages, but ey fail to show adequately how they are to be accomplished t present and in the future, i.e., how, say, to solve specific roblems relative to increasing the productivity of labor, reducing costs, etc. The point is not that these problems ave not received adequate treatment, but that they should e set forth in such a manner that students may obtain nowledge that they can put to use in their future jobs, ather than merely information, however interesting and enerally useful. It naturally cannot be expected that a extbook on industrial economics, as any other textbook, hould constitute a collection of recipes for every life situaion. But a textbook should offer more definitive and analytcal material so as to equip the reader with knowledge of e methodology of solving various types of problems encountered in practice. The textbooks deal to varying degrees f intensity and consistency with the methodology and proedures of planning industrial operations, chiefly describng the forms and methods of planning and employing a very imited number of examples. It is well known that VUZes of conomics teach a specialized course in national economic lanning, so that, consequently, the course in industrial conomics need include this material only for introductory urposes. But then, obviously, the methodology and proedures of planning must not become the central content of course in industrial economics.

As regards the economic justification of technical and rganizational measures in industrial production, it must e remarked that its related problems of determining the conomic effectiveness of capital investments, the teaching f new techniques, the implementation of technological imrovements and organizational changes in production are erely mentioned as existing by the authors. The textbooks n fact do not show how these problems are to be solved. ought to be shown, on the basis of generalizations from p-to-date experience, how it is to be decided where capil may most usefully be invested, what new techniques hould be applied, etc., in the various branches of industry.

Thus, the determination of the content of the course has rned out to be objectively unjustifiable. It is precisely is which explains the lack of any accurate distinction etween a course on the economics of industry and other ourses. For example, the textbook of the Economics Intitute of the Academy of Sciences of the USSR asserts that course on the economics of socialist industry should udy basic questions of the economics of enterprises age 17). And the MGEI textbook states that the course in nterprise economics is a part of the course on industrial conomics, that they share the same subject-matter and e most intimately bound to each other, but that one course udies the subject in branch of industry "cross-section" nd the other "from the point of view of the factory, plant ncluding shops, production sections, etc.)" (page 15). It is e view of the authors of the MGEI textbook that a course industrial economics "studies the enterprise from the andpoint of its interrelationship with other enterprises." bviously, it has not yet been determined whether it is rrect to separate the teaching of enterprise economics om that of industrial economics. It seems to us (and this emphasized in both textbooks) that it is difficult in a cialist economy to separate the operations of enterprises om the branch of industry and even from the national onomy as a whole. But, depending on the field of specialition of the student, this is methodologically feasible.

A comparison of both textbooks with textbooks on the economics of the various branches of industry reveals grave disparities in subject matter and in the manner of treatment of their most important material. For example, N. N. Nekrasov's textbook on "The Economics of the Chemical Industry" gives a different formulation of the object of the course. The author writes that "the economics of socialist industry studies the operation of objective economic laws of socialism in industry, ways and means to the economically effective development of socialist industry" (page 4), and that this course "studies and determines (!) the most advanced and effective methods in the area of the organization (!) and economics of socialist industry, its various branches and its enterprises, so as to permit the accomplishment within a short period of time of the economic objectives of the USSR" (page 6). The author regards the economics of the chemical industry as an integral component of the science of the economics of socialist industry and remarks that it is customary from methodological considerations to distinguish the course in the economics of the chemical industry from the course in economics, organization and planning on the enterprise level. In our opinion, this author is on firmer ground. The authors of other courses in other branches of industry also adhere particularly to this view.

Actually, if we ignore ingrained tradition and the content of both textbooks, and ask ourselves the question (which, by the way, is always asked by VUZ students and practical workers who use textbooks) as to just what the purport of the course is, a problem unavoidably arises which both textbooks have left inadequately solved.

If a course in the economics of industry is not to be reduced to a description of the existing state of affairs in this branch of the national economy (which, to some extent, a textbook cannot avoid), then ought not chief emphasis to be laid in the course on the problem of discovering and utilizing untapped reserves and, consequently, on the problem of increasing the economic effectiveness of production and managerial operations in industry (in branches of industry and in individual enterprises respectively) in order to speed up the accomplishment of the basic economic objectives of the USSR? If this is agreed, then it may be concluded that the overwhelming majority of the problems treated in the textbooks should be presented in another way. This presentation should be analytical, and not descriptive. Textbooks should present problems of economics and offer methods for their solution based on generalizations from the most up-to-date practice. It is only then that textbooks will really have their own specific content and identity, and that, in them, theory and practice will be organically linked together. It must be pointed out in this connection that, if we are to have a course on the economics of socialist industry, we may not ignore the noteworthy experience of the people's democracies.

To illustrate the views expressed above, let us examine a chapter generally found in textbooks — on the technical base of industry — as, through an analysis of this chapter, we will be able to form a reliable notion of an area in which textbook writers should exert themselves in future. Technical problems are above all concrete problems, bearing on specific areas of production. Textbooks on the economics of industry, on the other hand, treat the subject in an over-all manner. Objectives of socialist industry in the area of technical progress are closely interwoven with problems of economics. All this makes it indispensable that this chapter set forth solutions to problems of principle, and theoretically elucidate the more important aspects of production practice from the economic standpoint.

About the same number of pages is devoted in both textbooks to questions bearing on the technical base. These chapters are undistinguished as to content, leaving out the fact that the MGEI textbook includes a small section on developmental planning for new techniques and the determination of the economic effectiveness of their introduction in production, and that the textbook of the Economics Institute of the AS of the USSR has a few paragraphs on the effectiveness of the mechanization and automation of production. It must nevertheless be stated that the section in the MGEI textbook on developmental planning for new techniques does not fulfill the promise of its title. It is couched in general terms and amounts to no more than an outline of the structure of plans for the introduction of new techniques. But as to how, by whom, where and when such a plan is worked out and on the basis of what materials, which the channels of its passage and approval, how it is related to the national economic plan, to the industrial branch plans and to the plans of economic administrative districts — the textbook says nothing whatever. The material in the textbook on how to determine the economic effectiveness of introducing new techniques, is chiefly descriptive in character. The authors, unfortunately, have omitted to offer procedures for computing effectiveness and have not presented one single example of such computation. Nor does either textbook include a concept of such basic importance to this chapter as "technique," or analyse the mutual relation between technique and economics and a series of other important matters. These chapters are essentially of a descriptive nature.

This chapter should criticize erroneous formulations in which the concept of "technique" is limited to the mere equipment or accoutrements of labor, should point up the interrelationship of technique and technology. It would also be necessary to clarify the definitions of such terms as "technical level," "technical progress," "technical base," and "technical development," show the organic bond between technique and economics and how this bond manifests itself in the process of social production. The satisfaction of these needs would assist in the creation of a methodological base for the elucidation of basic trends or tendencies in technical development.

The textbook should also sum up the endless disputes on whether, for example, the organization of production constitutes an index of technical progress. In the textbook of the Economics Institute of the AS of the USSR, the intensification and raising of the level of production continuity is defined as a basic tendency in the improvement of technical and technological facilities (!) (page 113).

Where but in a textbook on industrial economics should there be shown the operative forms and methods of planning for the introduction of new techniques, how they are reflected in national economic plans, in branch industrial plans (or in plans of the national economic councils), and how they are related to the technical developmental plans of enterprises? And, finally, special attention should be given either in this or in a separate chapter to the methodology and procedures for determining the economic effectiveness of new production techniques, technology and organization, adducing an ample supply of examples and data from the wealth of experience accumulated at our enterprises, scientific research, technological planning and design organizations.

Neither textbook makes any reference to grave deficiencies in the development of techniques. To judge from an attentive reading of both of the chapters under discussion, the technical progress of our industry is in no way deficient. However, there are in fact deficiencies, as is borne out by a series of Party directives, and the authors should bring out, on the basis of these directives, how deficiencies and difficulties in devising and introducing new techniques ca be counteracted.

In our view, the manner of presentation of the textbool material should be revised. What is involved here is not a textbook on mathematics, physics, chemistry or some technical subject, where the material may be set forth o the basis of experimentally verified laws and formulas a in most cases, there is no necessity to examine the vari scientific concepts. But the position of the textbook auth gives rise to grave misgivings when they refuse critical to analize the various points of view, and scientifically t describe existing contradictions and deficiencies in the velopment of economic science.

They may object that this is a textbook, as they might say, and not a research monograph and that it should the fore reflect only positions that have been worked out and scientifically beyond dispute. This view would merit con currence if that were how matters actually stood. But, a has already been remarked above, the extent to which ev the more important problems of industrial economics ha been worked out, does not as yet justify the assumption many positions and conclusions arrived at are beyond di It is not an accident that several of the more important fundamental points of the course are formulated in the t books in dissimilar versions.

As an illustration of what has been said, let us take a brief look at the manner in which both textbooks interpr the principles of industrial management. Each of them devotes special sections to the basic principles of socia industrial management. Besides, the MGEI textbook contains a section on management methods. (In the textbook the Economics Institute of the AS USSR, this subject is treated under the section on principles of organization o socialist industrial management.)

The textbook of the Economics Institute of the AS USS formulates the following principles (and methods) of management (by the way, no distinction is drawn betwee principles and methods): 1) the principle of the unity of political and economic leadership; 2) the correct selecti and deployment of cadres; 3) the principle of one-man management; 4) the territorial-production basis (?) (als designated as a system); 5) the specific and operational character of leadership; 6) follow-up; 7) participation of the broad working masses in production management.

The reader is unable to distinguish from this list whic are the principles and which the methods of industrial management.

The MGEI textbook expounds these points quite otherwise. Here it is indicated that "democratic centralism stitutes the basis of the Leninist principles of leadershi in economic development" (page 84). It is further shown that, on the basis of this principle, industrial manageme is organized on a territorial production basis and that " implementation of the principle of democratic centralis is closely bound up (?) with the requirement (?) of ensuring unity of political and economic leadership" (page The authors are correct in viewing the principle of one-man management as conditioned by democratic centralis But it is further indicated, without any connection with t preceding text, that "one of the most important demands (?) made of industrial management is that it should be according to plan," and "that agencies of industrial man ment are called upon to strive by every possible means economy at every stage in production" (page 88) and, fin that "the successful accomplishment by industrial mana ment agencies of its objectives depends on the material stake of each worker in the improved performance of hi section, shop, enterprise and industry as a whole" (page

In addition to this, the section on methods of planned instrial leadership gives an account of the economic evaluaon, selection and deployment of cadres, of the effectiveness management, of state discipline and national state conol over enterprise operations.

We have extracted from both textbooks only a list of rinciples and methods of management (leadership), without tually discussing them, so as to show that there is no animity of opinion on what constitute the basic principles management. The textbook of the Institute of Economics the AS USSR, in the section on basic principles of ganization of socialist industrial management, mingles gether such concepts as "principle," "system," and "bas," and, what is most important, does not even mention a uly basic principle of management — democratic centralm.

The MGEI textbook, on the other hand, correctly points up e role and significance of the principle of democratic ntralism as a basic principle of management and endeavs from this principle to infer other principles of management. But here, too, the essential nature of the territorialoduction management system is brought out with insufcient clarity, especially with regard to the present stage industrial development. The achievement of unity of litical and economic leadership has turned out to be esntially a "requirement," mechanically attached to the rinciple of democratic centralism. The statement in the xtbook that "the political and economic spheres are ineparable in a socialist country" may generate the incorrect ea that this is not the case under capitalism. The law of bor time economy, referred to by Marx as a universal w applicable to all types of social production, is unjustiably allied to principles of management. The assertion of e authors, that it pertains to the principles of industrial anagement to provide material incentives, is also open to estion.

In other words, there is so much in both textbooks on the bject of principles of management that is unclear and conadictory, that this section can on no grounds be regarded beyond dispute. We are convinced, moreover, that the thors did not pretend that it should be. But, in that case, y not say that the problem of management principles and ethods has not yet been finally worked out scientifically d that there are diverse views on the subject? Why not ate the essentials of these views rather than seek to jusy one's own point of view?

Unfortunately, the example adduced does not stand alone. review of what has been said by people who have discussed ese textbooks, shows that there are other chapters which so contain several careless formulations and erroneous erpretations.

It is quite obvious that a better textbook on industrial onomics could be written considerably more quickly noways. This would require not only the elimination of isoted, personal deficiencies, but also a thoroughgoing resion of several traditional attitudes. The question must st of all be answered as to whether or not there ought be more than one textbook for any particular course and y particular readership. It seems to us that there should one single textbook for VUZes of economics. It would be pedient to organize a contest, and to issue two, three or en more courses, written on the basis of one model hedule by various groups of writers, conferring the title "textbook" on the best one, and designating the rest as aching aids, monographs, courses, etc.

The course schedule should be reviewed, discussed not ly with instructors, but with broad segments of industrial bor so as to determine which are the practical needs that such a course should meet. So long as teaching schedules and textbooks are drawn up without concern for these needs, no essential improvement of the course is possible. This is confirmed by experience to date. We think it would be useful and timely to convoke a large and representative assembly for the reading and discussion of methodological and procedural reports revolving around the industrial economics course.

One of the first things to be done in working out and discussing the schedule is to find the most rational solution to the problems of course content, its relation to overlapping, contiguous disciplines, the structure and methodical sequence of the course, the manner of its presentations, and of what principles are to be adopted as basic (methodological bases of the course).

We cannot be reconciled to the attitude that countenances the acceptance as textbooks for VUZes of economics, of works composed on the basis of different schedules. Is it really as difficult as all that to decide whether or not special chapters are needed to deal with basic stages in the development of industry (MGEI textbook) or with fuel and power supplies (textbook of the Economics Institute of the AS USSR), and how and where to expound questions of branch structure, enterprise autonomy, etc? If this is a textbook, it should adhere to the schedule, which has been arranged, not in accordance with the tastes and views of this or that group of however highly qualified instructors, but to meet the needs of industry, for which the cadres are being trained. The requirements which a textbook on the economics of socialist industry should fill, a corresponding schedule should then be drawn up, in accordance to which the textbook should only then be written. Although not easy, this task is by no means impossible.

Which problems should be amplified or worked out once again in future textbook editions?

It seems to us that, apart from the objective presentation of various points of view, and the critical analysis and grounding of this or that position, there are several central, fundamental problems that should be outlined. There should first of all be given a statement in broad terms of the problem of untapped production capabilities, of the ways of ferreting them out and putting them to use. It is here necessary to give a precise, scientific definition of the term "production capabilities" as a form of "reserves," and their classification on various bases and, what is more important, to show how reserves can be brought to light. This subject should be made pivotal to the course; it would confer a corresponding slant to the overwhelming majority of the other topics provided for in the schedule. The sections on the technical base, the quartering of industry, specialization and cooperation, as also many other sections, will include correct answers to questions of the optimum utilization of existing possibilities, of the elimination of waste and losses in industry and, consequently, of the maximal mobilization of production reserves.

The textbook should devote special attention to the practical accomplishment of the basic economic objectives of the USSR. An intensive treatment of this topic would considerably increase the ideological-political significance of the book.

It is extremely important that the manner of elucidating problems of economic effectiveness be radically revised. We should in this connection be concerned not only with the methodological aspect of the problem, which has not yet been finally resolved, but with practical procedures for determining effectiveness. And here, the determination of the effectiveness of capital investments should be carefully distinguished from the determination of the effectiveness of newly designed and constructed machinery, mechanisms, apparatus, technological processes and production organization (while at the same time bringing out their organic kinship).

If work is to be done to produce an improved textbook, it will be necessary to delve more deeply into the analysis of several indices characterizing this or that aspect of industrial operations. We cannot agree with the view of some of those who spoke at the textbook discussions that, since there already is a course on the analysis of economic activity, there is no need to give this subject treatment at all extensive in the textbook. This course, as a rule, teaches the analysis of operations on the level of the enterprise, and not of the branch of industry. Every part of the course should be permeated with analyses; this would make it more specific and scientific as a whole. In both textbooks, the chapters which analyse economic activity are the most concrete of all. Of course, the analysis should not be confined to a mere comparison of statistical data with the plan and the preceding period, but should be a truly economic (or technico-economic) analysis. It should embrace every aspect of the productive and economic activity of industry in its entirety throughout the country, the republics and individual economic administrative districts, and not only bookkeeping figures from enterprises.

A new textbook should not only reflect the industrial and construction management reform, but should also draw and record conclusions from it. Industry has already yielded up a wealth of experience of the new conditions of management.

The methods for editing textbooks should also be revised. A practice has in recent times emerged among us, in w
a group coalesces among the associated authors of the
and not only assumes direction over them, but also edit
textbook. In our opinion, it would be more expedient sic
by side with such “self-editing” to provide for the liter
and also for the scientific editing of every manuscript b
one qualified person other than one of the authors. This
help to eliminate the contradictions and duplications in
various parts of the course, which were pointed to in th
textbook discussions.

Unity of method must be achieved in presentation of r
terial. It seems to us, for example, necessary to reject
time-saving, but practically useless “brief conclusions
given in the MGEI textbook. At the same time, the title
should be amplified and more of the text printed in brev
type. Brevier type can particularly be used for expositi
of various points of view, for critical analyses, the just
cation of the authors’ views, etc.

Thus, on the basis of a discussion and analysis of bot
textbooks, it may be concluded that the publication of th
textbooks constitutes an important step forward in the d
velopment of a science of the economics of socialist ind
trial production.

Both textbooks are basic to the writing of new textboo
and teaching aids. The publication of these textbooks ha
made possible the discovery of serious omissions in the
course schedule and the planning of measures to fill the

It is the task of economists who are doing research in
the area of industry to devise a high-quality textbook on
the economics of industry which will answer the modern
needs of up-to-date Soviet science and practice.

I. Sonin and G. Mechkovsky:

Comprehensive Labor Economics extbook is Needed

he Economics of Labor. Textbook. Profizdat, 1957, 7 pp.)

The creative labor of millions of Soviet people, organized cording to plan on a nation-wide scale, is the cornerstone which the historical achievements of the USSR have been ilt. However, the theoretical elaboration of problems of socialist organization of labor still lags behind modern mands. During recent years, very few analyses and onographs on problems of the economics of labor have en published, not one single textbook or reference work on s subject has been released. It is for this reason that vorable consideration must be given to the attempt by the aching staff of the Moscow Trade Union College to pro- ce a textbook on the economics of labor.

The textbook consists of a short introduction and five sec- ns. The introduction describes the object and content of course in the economics of labor, examines the main fea- res of socialist labor, and defines the distinction between underlying principles and those of capitalist labor, and so goes into general questions of labor organization under cialism.

The subject of a course in the economics of labor is de- ed in the book as follows: "As a science, the economics labor studies an area of reality peculiar to itself — social oor and its organization at various stages in the develop- nt of human society..." (p. 3). It can be seen that the thor includes in the subject of the economics of labor, not y its social organization, but the entire labor process as ll. It is well known, however, that the labor process is ltifaceted, and cannot be made the subject of one science of the economics of labor. Various aspects of the labor ocess are studied by the natural, technological and eco- nic sciences. As for the economics of labor, it studies ecific relationships among people in the production proc- . V. I. Lenin showed that "not labor, but only the social m labor takes, the social organization of labor, is a ecific politico-economic category; in other words, the re- ons prevalent among people arising out of their partici- ion in social labor."(1) From this it follows that the nomics of labor studies the social organization of labor, remuneration, regeneration and distribution. And this stitutes the subject matter of the economics of labor as cience.

he introduction fails adequately to explain the position he economics of labor among the other branches of nomics. "...The course in labor economics," the book tes, "arises necessarily out of the political economy of ialism, but it ties in at the same time with several other ences (national economic planning, the economics of the ious sectors of production, the organization and plan- g of enterprises, etc.)" (p. 3). It cannot be discerned m this formulation what constitutes the interconnection ween the economics of labor and political economy, be- en the economics of labor and other branches of economics. In the meantime, the solution of this problem is of great importance for educational purposes as well as for the development of economic theory. It is well known that the problems and state of courses in labor economics are duplicated in courses in other fields of economics.

In our opinion, the economics of labor as a branch of science examines the specific forms in which general economic laws are embodied in the practice of the social organization of labor. The specific branches of economics (the economics of industry, of transport, of agriculture, etc.) examine the entire complex of problems relating to the economics of their field of activity, including problems of labor organization and remuneration as well. But this does not exclude, but, on the contrary, assumes the singling out of a series of synthetic sciences such as national economic planning, finance, monetary circulation and credit; among these belongs the economics of labor, which studies that which, common to the organization of labor and wages, to the regeneration and distribution of the labor force, is inherent in all sectors of the economy.

The authors of the introduction formulate what in our view are a number of inaccurate views. Thus, for example, describing the main features of socialist labor and its distinction on principle from labor under capitalism, they write: "The 'stigma' of the old capitalist society still survives under socialism not only in morality, but in economics as well...To these must above all be added the labor of the artisan, who manufactures a product to order for a specific consumer or for sale to a market, and also of the individual farmer, who grows his crops not only for his own consumption, but also for sale on a market. Besides, to such forms of labor is also related that part of the labor of kolkhozniks and cooperativized craftsmen which they put into their own subsidiary activities to produce or manufacture goods to be consumed by themselves. And finally, to these forms of labor must be added the labor of housekeepers and especially of domestic servants who participate either in the production of commodities for personal consumption (clothes, food, etc.) or in the performance of such forms of work as are peculiar to communal sectors of the economy." In the opinion of the authors, the character of all the indicated forms of work "does not essentially accord with the socialist method of production," and, "as socialism develops and consolidates, they will gradually be eliminated and replaced by work completely social in character" (pp. 7-8). Such an appraisal of the labor that kolkhozniks put into their subsidiary private land plots is erroneous. The socialist manner of production by no means precludes the existence of subsidiary cultivation by kolkhozniks which, in the given stage, constitutes one of the conditions for the unification of the personal and social interests of the members of the agricultural artel. It is also quite incorrect to regard the labor of workers and employees on collective or private truck and fruit gardens as "stigma" of the old capitalist society. It by no means follows from the characteristic employment by socialism of the entire able-bodied population in socially useful labor, that, under Socialism, all the able-bodied population may and should be employed in the collectivized sector of the economy. A certain portion of the able-bodied population must under Socialism be employed in private, subsidiary farming and housekeeping, labor which is also socially useful.

The textbook contains the incorrect assertion that, under

Socialism, the distinction between necessary and surplus labor falls away and, in our opinion, the concept of "productive capacity of labor" is wrongly opposed to the concept of "labor productivity."

The first section of the textbook deals with the productivity of labor in USSR industry. The rational distribution and economy of social labor are among the most important principles of Socialism. Familiarity with these principles is of great theoretical and practical importance. Consequently, it is quite right to begin a course in the economics of labor with an exploration of this main problem of socialist economy.

The first, methodologically most important chapter of this section, examines the economic nature and significance of the steady rise in labor productivity for socialist economic expansion, and defines the factors involved in this rise. The chapter correctly notes that, in contrast with capitalism, under Socialism the law of rising productive capacity of labor acquires pronounced significance. Unfortunately, this point has not been sufficiently developed.

The same chapter examines the conditions and factors involved in the rise of labor productivity under Socialism. The scientific working out of these problems is necessary to the thoroughgoing determination of idle productive potential and its utilization according to plan and, consequently, is bound up with the most vital needs of socialist practice. The first problem to arise in the undertaking of this task is the classification of factors.

The textbook proposes to subjoin all factors affecting the rise in the productivity of labor under two groups: 1) factors dependent on the level of development of the means of production and their utilization; 2) factors bound up with changes in worker strength, the level of its training and in the attitudes of the workers towards labor (p. 41). Developing this thought further, the author calls the first group material-technological, and the second socio-economic factors.

This classification of factors affecting the rise of labor productivity has acquired a certain currency in our economic literature; it cannot, however, be described as an unqualified success. It is evident that scientific classification demands the calculation not merely of one or two, but of a series of indices, the calculation of the various functions of natural, technological, economic and organizational factors in their various combinations. At the same time, these factors must be differentiated in respect to that sector of social production to which they relate in any given instance (national economy, the division, the plant). Only then will the classification of factors be practically useful.

The determination of the extent to which these factors, singly or in the aggregate, affect the rise of labor productivity, is of great scientific and practical value. Unfortunately, the work under review does not go deeply enough into this question and, in particular, the connection between changes in technological equipment and labor productivity is not analyzed as it should be. The book determines the degree to which labor is equipped by finding the ratio of all basic production funds (by value) to the number of workers; such a method of measuring the equipment of labor is questionable because the various types of basic funds fulfill different functions in production. While some of them (production equipment) participate directly in the production process, others (transportation equipment) participate only indirectly, and a third group (buildings and construction) are no more than a necessary condition to the production process.

The second chapter of the first section of the textbook deals with technological progress in the USSR. It shows the superiority of socialism over capitalism in technologica development and the basic paths of technological progre

It should be emphasized in this chapter that the specif character of technological progress in the various branc of the national economy are conditioned both by historic factors of development and by industrial-technological peculiarities. It is otherwise impossible correctly to ex plain the uneven advance of technology in the various ar of social production. It is just because a specific analys of this sort is lacking that the author has been led to the incorrect generalization that automation has been widel applied in industry (p. 69). This is true only with regar the generation and distribution of electric power and in few other industries. Indeed, in most branches of indust automation is employed only in isolated production stag or departments. The relative importance of automated i dustrial plant and equipment is small. On January 1, 19 no more than 6.3 per cent of all metal-cutting lathes we automated or semi-automated.(2)

The degree to which machines and apparatus are utili materially affects the rise of labor productivity. Increa extensive and intensive use of means of mechanization a quire even greater importance as the technological qual of equipment provided to labor improves. However, the book does not fully disclose the economic nature of this problem. It recommends the coefficient of the degree of electrification of labor as an index of the degree to whic production processes have been mechanized, whereas it well known that direct indices of the level of mechanizat of production processes are employed in actual planning and calculations. This level in particular may be define as the ratio of the volume of mechanized jobs to the tota job volume. The level of mechanization is arrived at in this manner in, for example, the coal, wood and other in dustries.

The third chapter, on "Raising the Cultural-Technolo ical Level and the Material Well-Being of the Workers Factors in the Rise of Labor Productivity," is written i excessively general terms. The interconnection betwee technological advance and changes in labor functions, be tween technological advance and the training of the work the effect of improved worker training on labor product are all weakly analysed. Meanwhile, the answers to the questions are of important practical value for the organ training and rational utilization of qualified workers.

The fourth chapter of the first section, "Socialist Lab Discipline, One-Man Management, and How They Affect Rise of Labor Productivity in the USSR," correctly poin out the necessity for inculcating and reinforcing Sociali labor discipline. It is well known that the need for stre ening labor discipline is in no way lessened by the stea rise in the level of conscientiousness and discipline of toilers in Socialist society. It would obviously have to shown that this ties in with changes that have occurred physical production and with the necessity to accelerate productive activity of the laborers. The higher the deg to which labor is equipped, the more far-reaching the sp zation and division of labor, the more intense the degre labor organization and discipline must be.

Fluctuations in the composition of the labor force, so deleterious to the national economy, cannot be left out discussions of labor discipline. The stability of cadres an important condition for the improved utilization of te nology, for the increased productivity of labor and the duction of costs in the training of cadres. Unfortunately the book does not give sufficiently adequate treatment t problems involved in combatting fluctuations in cadre c position.

The fifth and last chapter of the first section describes socialist competition and how it contributes to the improved organization and increased production of labor. This chapter gives an on the whole correct exposition of the principles and purposes of the organization of socialist competition in ndustry. However, the interpretation of practical and posiive experience available in the organization of socialist competition is weak.

Unfortunately, the textbook does not acquaint the student with the most characteristic techniques of the innovator or with his methods of study and of making generalizations; here is lacking an analysis from this point of view of such ways of passing on production experience as technological standardization and organizational-technological plans, which secure the widespread and systematic dissemination of valuable techniques. The textbook also fails to discuss other essential problems connected with the organization of socialist competition and the distribution of up-to-date experience, particularly such as, for example, the organizaion of technical information in industry, which is especially mportant now that management has been revised; economic stimuli to the development of socialist competiion and exchange of experiences and others.

The second section sets forth the problems of organizaion and standardization of labor in industry. The first chapter of this section acquaints the reader with the producion process and the principles of its organization in enterprises in the USSR. It must be noted that these problems are usually treated in a special course on "The Organizaion of Industrial Production." It seems to us that the auhors have not succeeded in their search for a concrete method of presentation that would avoid duplication of maerial.

The second chapter examines problems of the technical standardization of labor in industrial enterprises. This chapter makes clear what a production operation is, how the expenditure of labor time is classified and studied, and it sets forth a method for setting up technical time standards, etc. It is well known that the labor standardization process ncludes not only the establishing of norms, but the devising nd teaching of the most efficient labor procedure to which he established norms are to apply. The textbook should give more attention to this aspect of the problem; it should show how norms are fixed, their effect on the rationalizaion of production and labor, on the distribution of labor ime, and it should also explain the function of standardizaon as an objective method for the quantitative determinaon of labor and compensation.

The textbook leaves out as important a subject as the rationalization of standardization procedures themselves. t is well known that the application under factory conditions f the standardization methods recommended in textbooks ften involves considerable expense. At the Neva Machinery Plant, for example, the expenses incurred in the calculation f norms for certain components by means of the analytical tandardization method, tripled the cost of these components.

An effective means of simplifying and reducing the amount f time required for the determination of technically valid orms is to establish typical and consolidated norms based n the classification of technological processes by types. he standardizers may also render their work more eficient by the use of special technical aids: nomograms, ables, slide rules and calculating machines.

One of the most important conditions for raising the roductivity of labor is that it be scientifically organized. he book under review goes into the organization of labor a special sub-heading in the second chapter, but the reatment does not take into account the concrete connections between labor organization and the specific technical level and type of production.

The textbook examines forms of division of labor in industrial enterprises without adequate analysis of the economic expediency and limits of division of labor. It says on page 187: "The more intensively division of labor by operations is introduced, the greater the possibilities for the use of specialized machinery, tools and instruments, the easier it becomes for the worker to acquire the necessary motions of his job, the more stable labor organization becomes on the work site." In reality, experience shows that division of labor has its optimum limits. The excessive breakdown of operations and narrow worker specialization is economically justifiable only in situations where manual labor by unskilled workers predominates. Where labor is highly mechanized and the workers are culturally and technologically advanced, an extreme breakdown of technological processes sometimes hinders the rise of labor productivity. In a machinery plant (used by the textbook as an example in the examination of forms of labor division) this leads to considerable dissipation of labor in drawing up the technological process and its corresponding paper work, and in special tooling and instrumentation. A multiplicity of technological processes complicates the planning and organization of production, necessitates a large number of readjustments of the machinery, thereby limiting the possibilities for its best utilization, hinders the struggle to improve product quality, etc.

The book is weak in its elucidation of the organization of the labor of auxiliary workers which, in industry, comprise at least half of the total work force. Only one paragraph is devoted to this important question although, in current industrial production, the function of auxiliary workers is by no means secondary. The course of basic production depends in many ways on the manner in which labor is organized in the transport, tooling, repair and other services. It is well known that the auxiliary departments of production have been gravely lagging behind basic production in the organization and mechanization of labor. This, in particular, explains the presence in many enterprises of an excessive number of auxiliary workers. The elimination of the lag in the auxiliary services will make possible the improved utilization of plant, the transfer of some workers to jobs in basic production and, in the final analysis, will contribute to increased productivity of social labor. Unfortunately, the textbook gives no indication as to how these aims can be reached.

The last chapter of the second section, on "Rudiments of the Analysis of Labor Organization and Standardization in Enterprises in the USSR," contains a quantity of useful information. This chapter is deficient in that it makes use of conventional examples and figures, whereas, in our opinion, this chapter should be based on practical material.

The third section of the book deals with questions of labor compensation in the national economy of the USSR.

Wage theory, under socialism, is built on the scientific basis of socialist distribution of the social product. The authors have correctly set forth Marx's statements on this problem, but then go on to arrive at a completely incorrect conclusion. They write: "Thus, under socialism, the aggregate social product breaks down into two parts: one part is set aside for satisfaction of the personal needs of the workers, and the other to replace consumed means of production, to expand socialist production, for cultural development and the upkeep of governmental machinery, to strengthen the country's defenses and other public purposes" (pp. 216-217). These reasonings contradict Marx's scheme, according to which the aggregate social product breaks down into two parts: the fund for depreciation and consumption of the means of production and the national income. In turn, the national income is also divided into two parts: the accumulating fund and working fund. The working fund consists of a fund for payment of wages to workers and a fund for public works. As can be seen from the above quotation, the authors give quite a different meaning to the content of the two parts of the aggregate social product.

In this chapter, the authors state, but do not explain, the questions of the correlation between the rates of increase in wages and in labor productivity, and of wage disparities from field to field and from district to district. Various elements of the scaled wage system and, particularly, the job-scale hand-book, are inadequately described. The job-scale hand-book is the chief means for the comparative evaluation of the various types of work and, consequently, of disparities in wages dependent on the skill or training required on a specific job. The current practice of dividing jobs into categories has many grave defects. It must be borne in mind that the method in use for job scaling was laid down during the period of the first five-year plan, when manual and manually-operated machine operations were the rule. The high level to which labor is now technologically equipped and of workers' production skills calls for a revision of the method of comparative evaluation of the various forms of labor. However, the textbook does not reveal these deficiencies of job-scale handbooks.

The third chapter of this section describes the forms and systems of wage payments in use in Soviet industry. It would be expedient here to show the dependence of the form or system to be applied on the type and technological level of the industry involved, and to set forth the principles governing the determination of the economic effectiveness of various wage systems.

The textbook states that whether piece or time wage rates are to be introduced depends completely on the standardizability of the labor involved and the quantitative and qualitative calculability of output. As a matter of fact, this is neither the sole nor the chief criterion. For example, in highly mechanized production belt sections, where production output depends on the previously worked out techniques and schedule of machinery operation, it is as a rule inexpedient to apply the piece-wage system although it is here entirely possible to standardize and calculate the output of the worker. In such sections, as experience shows, it is more correct to make use of the time-bonus system, which also simplifies the computation of wage earnings.

We cannot agree with the appraisal of indirect piece-wages as given in the textbook under review. Indirect piece-work calls for complex computation and is ill understood by the worker, inasmuch as it indistinctly reflects the relation between the results of his labor and the final output. It seems to us that one of the things to be done if the payment of wages is to be put in order is sharply to reduce indirect piece-work. The book, however, advances a proposal that this system be more widely applied. On page 320 it is stated: "The wider application of indirect piece-work is also an important condition for the liquidation of fictitious piece-work. The existing view that an extremely limited number of workers on time rates can be shifted to a piece-work basis is untrue. The experience of leading enterprises shows that indirect piece-work can be applied as the basis for wage compensation to 40-50 per cent of the workers servicing workers engaged in primary production." Which leading enterprises are meant here is not known. But the experience of wage regulating in 14 machinery manufacturing plants (the Kuibyshev internal combustion locomotive works at Kolomensk, the Vladimir Illyich electric machinery plant in Moscow and others) is leadin to their abolition of the indirect piece-wage system. Mos of the workers who formerly were employed under the in direct piece-rate system have been shifted on to the time bonus system.

The fifth and sixth chapters of the third section presen factual material on scheduling of wages in agriculture, construction, transport, etc. The attempt is made here t show the connection between the organization of labor in each of the areas of the national economy examined and t scheduling of wages. But the attempt is not entirely successful. Thus it is pointed out on page 299 that one of the characteristic features of railroad labor consists in the wide dispersal of the transport establishments over the v territory of the country, and also in that a large part of t transport workers has not been brought together into lar collectives. However, it is not discernible from the text that follows how this affects the organization of the wage of railway workers.

The fourth section is devoted to a discussion of the pla ning and analysis of labor indices.

The textbook offers a quite interesting scheme for the classification of areas in which labor productivity could further increased. According to the scheme, these areas are subsumed under two headings: 1) further reduction the time required on each job; 2) the improved utilizatio of labor time. The superiority of such a classification li in that it makes it possible to peg all potentialities for in creasing labor productivity on one index — labor time. T methods for computation of increases in labor productivi should be specified. The author performs this computati on the basis of combined figures from the organizational technological plan for the reduction of production and the utilization of labor time. In practice, however, labor pro ductivity is computed one factor at a time by determining what economies have been achieved in labor time.

It is a defect of this section that it mainly discusses factory planning methods. Meanwhile, it would be important to show and emphasize the function of planning in the rational organization of social labor and its economy on the scale of the national economy as a whole and of the economic territorial unit.

The fifth section of the textbook dwells on problems of reproduction and distribution of labor power within the USSR. The section opens with a short chapter setting for the nature of socialist reproduction of labor power and the sources of its replenishment.

It must be noted that the textbook has committed inaccuracies in the definition of certain basic concepts. Thu for example, the nature of socialist reproduction of labo power is defined as follows: "Socialist reproduction of labor power is the process of restoration and preservati of labor power engaged in social production, and the pro ess of increasing the number of workers at the expense the natural population growth for the systematic expansi and securing by trained cadres of a broadened social pr duction" (pp. 410-411). It is first of all impossible to un derstand why "the process of restoration and preservati of labor power" relates only to workers engaged in the field of social production and not to the entire able-bodi population. It is well known that broadened population re production is a general premise to broadened reproducti of labor power. While correctly emphasizing this point, the authors, however, give no probing analysis of change in progress in the movement of population in the USSR.

The book also betrays basic deficiencies in the definit of the concept "sources for replenishment of the labor force." These sources include: youth, entering producti rough the system of state labor reserves; that part of the ble-bodied population which is drawn into industry, con- ruction and transportation through the organized recruit- ent of manpower; adolescent boys and girls who, having oncluded an incomplete course of secondary training and econdary general education (or who for various reasons ve left school), take jobs; part of the adult able-bodied opulation (housekeepers, etc.) which independently finds bs in enterprises and organizations; part of the able- odied population which is put to work through migration; orkers and employees, released from individual fields of bor as a result of reductions in the labor forces employed these fields, and transferred from less to more impor- nt areas of the national economy; invalids who have pre- erved some of their capacity to work and subject to labor ganization (pp. 415-416).

Such a definition of "sources" essentially ignores the ocial designation, i.e., the affiliation with a specific social roup. In addition, the true sources for replenishment of orker cadres are confused with forms of manpower re- stribution among branches of the national economy.

There also are important deficiencies in the second chap- r of this section, which deals with questions of the organ- ation of recruitment, training and distribution of man- ower. These questions are examined from the organiza- onal-legal point of view (the chapter discusses the order which plans are to be worked out, the manner of recruit- ent and distribution of youth within the system of state bor reserves, and the order of labor recruitment for easonal sectors of production; it enumerates privileges ccruing through organized recruitment and migration, c.). The economic questions are inadequately elaborated.

The third chapter of this section subjects to rather de- iled scrutiny problems of planning training and increas- g workers' skills, and also methods of teaching them ithin the state labor reserve system, in industrial training chools and through on-the-job training, including sovkhozes d kolkhozes. But, as in the previous chapter, the econom- aspect of training and increasing workers' skills has not een given the attention that it deserves. More particularly, e chapter does not go into the problem of expenses in- olved in training and increasing workers' skills, nor does discuss the question of the comparative effectiveness of rious forms of training. It does not point out deficiencies the training, recruitment and distribution of manpower. l this has prevented the determination of prospects for e development of some methods rather than others of aining skilled cadres and drawing them into the labor ocess.

The chapter on the training and distribution of specialists thin the USSR is well written. It not only indicates the ethods for determining the need for specialists and the der of their distribution, but also their role in the social ocess of production.

The last chapter of this section examines the methods for tting up a balance sheet of manpower in the USSR. The thors of the chapter have widely utilized the systematic structions of planning agencies on how to draw up a man- wer balance sheet. However, these materials do not pro- de a complete picture of the balance of labor, particularly the processes of labor redistribution by sector of the onomy and area of territory, and of the peculiarities of prospective manpower balance in the country.

It must be remarked that the chapter on the balance of npower gives little attention to an explanation of this oject in connection with the national economy.

The textbook is lacking in structural harmony and in stematic unity in the presentation of material. Thus, while problems of labor productivity and manpower expansion are considered from the point of view of the national economy, the organization of wage payments is explained on the level of the branch of the economy or industry, and labor planning on the factory level.

Also, the book totally ignores the question of the organization of the work of engineering-technological workers and employees. The present-day high degree of mechanization of enterprises requires a qualified management. The Party has more than once pointed to the necessity of simplifying and reducing the cost of management as much as possible, and of improving its operation. The accomplishment of this aim is connected with the improved organization of the work of management personnel. The improvement of the work of engineers and employees requires the rationalization of their labor on the basis of the extensive utilization of technological resources to reduce and simplify production management.

The work under review is repetitious. Inasmuch as there is one whole chapter on the organization of labor, there was no need, for example, to make room for this same subject in the section on wages.

The book contains many careless statements. For example, it is said on p. 71 that "With a view to eliminating existing defects, the Party congress outlined a vast program for the further automation of industrial production." In reality, however, the necessity of automating industrial production is conditioned by the over-all course of technological and production development, and not by this or that transient defect.

There are also factual inaccuracies. On p. 55 it is pointed out that industrial output in 1955 was 25 times greater than in 1913, and the production of means of production was 52 times greater. In actual fact, however, gross industrial production increased during the period in question 27 times, and the production of means of production 60 times.(3)

Page 96 inserts a reference to standard job routines for workers and employees of state and public enterprises and institutions, which have not been in effect since January 12, 1957.

Finally, attention must be drawn to still one more defect in the work under review: it almost completely fails to mention the work of the Soviet economists whose researches have made possible the formulation of the economics of labor as a science (Academician S. G. Strumilin, Prof. B. L. Markus and others).

The work under review contains a wealth of useful material but, however, is preponderantly an instrument of methodical instruction. The book lacks adequately profound economic analyses of specific problems and suffers from important omissions in the theoretical elaboration of basic problems of the economics of labor.

The writing of a serviceable textbook on the economics of labor is an important task for economists.

FOOTNOTES

(1) V. I. Lenin, Works, Vol. 6, p. 236.

(2) See A. Arakelian, K. Klimenko, Technological Progress in USSR Industry. Moskovsky Rabochi Pub. House, 1957, p. 25.

(3) See "Industry of the U.S.S.R." Statistical Handbook, State Statistical Publishing House, 1957, p. 9.

C. Stepanov:

A Book About the Economics and Organization of Bulgaria's Socialist Agriculture

(Problems of Economics and Organization in the TKZKh's, MTS's and GZKh's. Bulgarian Communist Party Press, Sofia, 1958, 559 pp.)

Under the leadership of the Communist Party, the Bulgarian people have, within a short historical period, made large gains in the development of agriculture. Grain yield capacity has risen, livestock and its productivity has increased, the volume of agricultural output has grown. If in 1939, one of the most productive pre-war years, agricultural production amounted to L.37,316 million, then, in 1955, the volume of agricultural production rose to L. 43,248 million and in 1957 was valued at L.47 billion (at 1939 base prices).(1)

Adhering to the Marxist-Leninist thesis that a socialist society cannot be erected without socialist reform of agriculture, the Bulgarian Communist Party, from the earliest days of the peoples democracy, has consistenly and steadfastly supported and organized the shunting of the worker peasantry onto the road to Socialism. As a result, the overwhelming majority of the Bulgarian peasantry is now unified under agricultural workers cooperatives (TKZKh's). At the present time, about 92 per cent of all land under cooperative cultivation is held by agricultural workers cooperatives; 53 state farms (GZKh's) have been set up. Socialism has gained the victory in Bulgarian agriculture.

In the report of the Central Committee of the Bulgarian Communist Party at the Seventh Party Congress, the First Secretary, Comrade Todor Zhivkov said: "Socialism is victorious in the Bulgarian countryside. This means that the Party has been able gradually to separate the village from the capitalist process of development and has drawn the worker peasant into large-scale collective farming. Socialist relations of production, relations of comradely cooperation and brotherly mutual assistance, have already been confirmed with finality in our villages."(2)

The success of the Bulgarian people in the development and Socialist transformation of agriculture is evidence that a wealth of experience has been amassed in agricultural management and in its socialist reconstruction by the Bulgarian Communist Party. It is important that this experience, which is of unquestionable academic and practical interest, be elucidated and generalized. Therefore, the collection of essays on problems of the economics and organization of the TKZKh, MTS and GZKh, released by the Communist Party press, cannot fail to attract attention.

The collection treats a broad range of problems relative to the Socialist reconstruction of Bulgarian agriculture, the organizational-administrative structure and the operation of the TKZKh's, the development and improvement of the MTS's and GZKh's are examined, their role in agricultural reconstruction is shown. The materials of the collection describe the process of Socialist reform throughout the countryside, the peculiarities and achievements of this process, and also difficulties and inadequacies in the development of agriculture in Bulgaria.

The preponderant majority of the articles in the collection under review is concerned with the analysis of the economics and organization of workers' cooperative farms. And this is no mere chance. The TKZKh's constitute the foundation on which Bulgarian agriculture is built.

The collection opens with an article by I. Ranchev on
"The TKZKh — the Road to Socialist Reform of Agricul-
ture." The author outlines the special situation confront
ing the execution of the Leninist cooperative plan in
Bulgaria. As is well known, the socialist reform of agri
culture in the peoples democracies is accomplished with
the nationalization of all land; private land ownership is
preserved (within certain limits). This could not but co
plicate the task of finding a form of cooperative moveme
which would take the attachment of the peasantry to the
into account and, at the same time, would harmonize the
personal interests of the peasant with the interests of
society. Moreover, this form must pave the way for the
gradual liquidation of private land ownership, for its co
version to social ownership. The Bulgarian Communist
Party has successfully coped with this task. "In the
TKZKh's," said Comrade Zhivkov at the Seventh Congre
the Bulgarian Communist Party, "the Party has found th
form of socialist reconstruction of agriculture most sui
for the unification of the peasant workers in the struggle
free them from capitalist exploitation and for a better li

Under Bulgarian conditions, the TKZKh is that form o
cooperative production which successfully combines the
personal and social interests of the peasants. This is
achieved by establishing large economic communities w
preserving private ownership of the land brought into th
cooperative, individual subsidiary farming by members
the cooperative and the distribution of profits according
only to work done, but to the extent and quality of the la
brought into the cooperative. It is by means of the TKZ
that the groundwork is best laid for the collectivization
the land, since it ensures the gradual re-education of th
peasant through continuous improvement of his material
cultural living standards.

The TKZKh did not emerge suddenly as the basic for
be taken by the movement of the Bulgarian peasant work
towards Socialism. Ranchev's article emphasizes that t
TKZKh's originally existed merely as sections of rural
cooperatives. Later on, as the economic activities of th
TKZKh's rapidly grew and expanded, they were detache
independent cooperative enterprises. The TKZKh Statut
adopted after discussion at the second national conferen
TKZKh representatives in April, 1950, confirmed this f
as basic to the cooperative movement and as the means
ensure the transition to socialism of the peasant worker
Bulgaria.

The TKZHh is a unique means of effecting the transiti
to fully collectivized agricultural production. It is uniq
that its production is based on various forms of land ow
ship — state, cooperative and private — which is why p
of the profits in kind and in money must be distributed i
accordance with the extent and quality of land contribut
the cooperative.

The article attempts to clarify the socio-economic na
of the profit received by the members of the cooperativ
based on land. However, little space is devoted to this i
quiry, although it is deserving of greater attention.

The forms of land ownership of the TKZKh are not an
lyzed in the article. The author limits himself to the stat
ment that various forms of ownership prevail on the TK
We, on the other hand, are of the view that this question
needs to be examined in detail.

The collection contains a substantial article by T. Ch
kolev on "The Development and Consolidation of Commu
Farming on the TKZKh's — The Chief Condition for In-
creasing Agricultural Production and Profits to the Co-
operatives." It emphasizes that communal farm econon

the TKZKh's is the principal source of foodstuff supply the population and of raw materials to industry. The con- olidation of communal farming on the TKZKh's is the chief eans of increasing the income of members of the coopera- ve and of improving their material welfare. The members the cooperative are vitally interested in the expansion d development in every possible way of the material base the communal farm. The author introduces factual ma- rial in witness of the great achievements of the TKZKh's the establishment of communal farming and in the rengthening of Socialist ownership. Data on the growth of n-distributable funds in the TKZKh's, which by 1955 had in reased by more than three times over the figure for 1950, e particularly significant in this respect. (p. 79)

Chernokolev gives particular attention to an analysis of ctors conducive to the growth of the communal farm. The thor shows the heightened importance of state funds in the evelopment of agricultural production. The increase in the tio of TKZHh production to total agricultural output and the harvest yield of agricultural cultivation on the KZKh's. The article presents factual material reflecting e profound concern of the Bulgarian Communist Party and e peoples democratic government for the strengthening of e TKZKh communal farms, on the correct harmonization the personal interests of the cooperative members with eir community interests. A new, vivid proof of this is fered by the amendments and additions to the TKZKh atutes, adopted through the initiative of the Bulgarian ommunist Party by the fifth national conference of agri- ltural workers cooperatives. These amendments relate iefly to the percentage to be allotted, from the income of e farm in kind and in money, to the non-distributable funds. hereas, under the Statutes as formerly in force, the size the allocation to the non-distributable fund was 5 per cent d the cooperative membership did not have the right to crease or decrease it, now the cooperatives have been anted the right to alter the percentage to be allocated to e non-distributable fund depending on specific conditions d on the volume of production on the individual TKZKh's. n the decision of the cooperative membership convened in neral assembly, from 5 per cent to 15 per cent of the onetary income of the farm may be assigned to the non- stributable fund during the course of the year; besides, in se of need, from 2 per cent to 7 per cent of the total eat, corn and sunflower seed harvest may be added to the n-distributable fund.

Chernokolev's article contains a few statements which, in r view, are subject to debate. The author's assertion, r example, that the TKZKh's "apply no funds whatever for e purchase of land" (p. 72). It is, however, well known at several TKZKh's, especially in the first stage of de- lopment of the cooperative movement, invested part of eir community funds in the purchase of land. In the pres- t day, in isolated cases and whenever it is felt to be cessary, the cooperatives still buy land. On the whole, so ng as private land ownership subsists, cases of wastage cooperative funds for the purchase of land may continue occur. It also must not be forgotten that, in its own way, come based on land contributed to the cooperative con- tutes ransom on that land.

The article by A. Tanov and V. Monov, "Increased Labor oductivity is the Basis for Increased Agricultural Pro- ction," attempts the elaboration of a method for calculat- the productivity of labor on the TKZKh's. The authors rive at the conclusion that, due to the peculiarities of ricultural production, one index for the characteristic of labor productivity level on the TKZKh's is inadequate; at is needed is a system of indices which would reflect the productivity of labor in agriculture as a whole and in its chief branches.

P. Kirev devotes his article to problems of the intensification of socialist agriculture. The author examines in detail the conditions and factors determining the level of agricultural intensification in Bulgaria, and also cites improvements brought about in this area during recent years. The material introduced by the article suggest that the level of intensification of agricultural production in Bulgaria is steadily rising, an indication of which is the rise in local and state investment in the TKZKh's per 100 hectares of land. In 1953 the investment of basic means of production in the MTS's and TKZKh's was L. 159,900 per 100 hectares of land, whereas in 1955, it had grown to L. 212,700. This constitutes an increase of more than 33 per cent in the investment of basic resources in the MTS's and in the TKZKh's themselves during the years 1953-1955 alone. In 1957 this investment amounted to L. 257,000.(4)

Structural changes in agricultural development, especially the increase of land under intensive cultivation, also testify to the intensification of agriculture in Bulgaria. Thus, as compared with 1939, land area cultivated in 1957 as vineyards had increased by 115.9 per cent, as truck farms by 238.4 per cent, as orchards by 296.2 per cent, in tobacco by 220.2 per cent and as cotton fields by 233.9 per cent, etc.(5)

It would be incorrect, however, to assume that Bulgarian agriculture has become intensive at the present time. As noted by Comrade Zhivkov in his report to the fifth national TKZKh conference, a planned and gradually accelerated intensification of production is a top-priority task of Bulgarian agriculture if fullest and most efficient utilization of the land is to be achieved.

Kirev's article points out additional means by which the intensification of agricultural production in Bulgaria may be accelerated. This involves primarily an increase in crop yields by the introduction of high-yield, good quality seed, of advanced methods of agricultural engineering, the efficient utilization of organic and mineral fertilizers, improved organization of labor and increased mechanization of production.

Broad possibilities for the further intensification of Bulgarian agriculture are opened up as a result of the agreement between Bulgaria, the Soviet Union, the German Democratic Republic and Czechoslovakia with regard to increasing production and export from Bulgaria of fresh and processed grapes, fruits and vegetables. This agreement provides Bulgarian agriculture with a secure and steady market, which permits the elaboration of a long-range plan for the development of cultivation over many years and for improving plant and equipment, and the further intensification of Bulgarian agriculture.

The reader will find interesting data on the diversified development of the TKZKh's in the article by A. Spasov and P. Trifonov on "The Diversified Development of Communal Farming on the TKZKh's and Correct Proportions for Diversified Farming." In this article it is shown that, in contrast to the small holding and to the large-scale capitalist farm, the TKZKh's are developing as diversified farms. The extensive land area of the TKZKh(6) and the high degree of mechanization of production allow the correct alternation of crops, harmonious programs for tillage, cattle-raising and subsidiary farming and, thereby, the fuller and more productive utilization of collective labor, land and other means of production. The TKZKh of the village of Dbovik, in the Generaltoshev district, is a typical example of diversified farming. Before the cooperative farm was established, the peasants planted almost nothing but grain. Having been brought together into the cooperative, they began to branch out into other types of farming. At the present time, the TKZKh of Dbovik grows industrial and forage crops, and vegetables; cattle, sheep-raising, pig-raising and chicken farms have been organized.

Several articles in the collection are concerned with questions of organization, standardization and remuneration of labor on the TKZKh. They include the following articles: D. Volkov, "The Organization, Standardization and Remuneration of Labor in Plant Growing"; N. Misheva, "The Organization and Remuneration of Labor in Truck Farming"; M. Minkov, "The Organization, Standardization and Remuneration of Labor on the Livestock Farms of the TKZKh's." These articles show how forms and methods of organization and remuneration of labor gradually evolved alongside the development and organizational economic strengthening of the TKZKh. During the first stage of development of the cooperative movement, brigades on most TKZKh's were either too large or too small, and their personnel was not constant; in many cases the land, inventory, work animals were formally attached to the brigades. Wage-levelling occurred in remuneration for labor. All this had a negative effect on the organizational-economic conditions of the TKZKh. After adoption of the TKZKh Statutes and the resolution of the Central Committee of the Bulgarian Communist Party and the Council of Ministers "On Measures to Improve Organization and to Raise Productivity and Renumeration of Labor on the TKZKh's," the permanent standing brigade became the basic organizational unit of all TKZKh's without exception. At the same time, mainly complete brigades are currently being set up to tend field crops as well as perennial plantations, tobacco, etc., as distinct from pre-existing narrowly specialized brigades. On isolated TKZKh's, especially in the mountain regions, permanent brigades have begun to be set up which are charged with some form or other of livestock raising in addition to their responsibilities as cultivators.

Remuneration of labor has also undergone important changes. Labor on the TKZKh's is now being paid for in accordance with its quantity and quality, which finds its fullest expression in payment for output achieved, i.e., for the final results of labor. More and more cooperative farms have been changing over in recent years to such a wage system, where 100 grams of produce (or products to the value of L.100), obtained from specific crops or groups of crops, is taken as a base figure.

This wage system has not, however, been introduced on all cooperative farms. "Our job now," said Zhivkov at the fifth national TKZKh conference, "is to study the wealth of experience of the cooperative farms in the organization and remuneration of labor and boldly to put into practice the experience that proves most valuable, with a view to increasing the material interest of the members in their cooperative and their activity on the job, and to consolidate the social economy of the TKZKh's as rapidly as possible."(7)

Problems of the analysis of economic activity and internal economic planning are treated in the articles by N. Palagachev, A. Grigorova, D. Ruskov and D. Penkov, "The Economic Analysis of Operations in the TKZKh," and G. Kostadinov, "Internal Economic Planning on the TKZKh." M. Georgiev's article is devoted to problems of TKZKh management. It notes that the TKZKh's are managed on lines of intra-cooperative democracy, which is a powerful weapon of the Party and peoples democracy in the socialist education of erstwhile private farmers.

The MTS's are a factor of tremendous importance in the Socialist transformation of agriculture and in the development and organizational-economic consolidation of the TKZKh's. The operations of the MTS's, their socio-eco
nomic nature and function in the socialist reconstructio
of the countryside are analysed in articles by L. Konsta
tinov, "The Machine-Tractor Stations — a Base of Supp
to the State in the Creation, Development and Consolida
of the TKZKh's," and by G. Minchev, "The Reduction of
Tractor Operation Costs in the MTS's."

These articles mention that the peoples democratic g
ernment moved to set up MTS's during the very first da
after the victory of the armed uprising. In 1945, five M
were established, mainly in grain-producing regions; th
are 209 MTS's in Bulgaria today, in which about 29,000
tractors (rated at 15 h.p.), more than 5,300 combines a
thousands of other agricultural machines are concentra

The MTS's passed through three stages in their devel
ment in Bulgaria. In the first stage, up to 1948, the MT
were cooperative enterprises operating as sections atta
to regional cooperative unions. In accordance with the l
passed by the Grand National Assembly on March 2, 194
the MTS's were converted from cooperatives to state en
prises of the successive socialist type. In the second st
(1948-1950), the material-technological base of the MTS
was significantly reinforced at the expense of machines
and inventory compulsorily purchased from the rural ex
ploiter classes. Henceforth, thanks to the tireless conc
of the Party and government, the MTS's began to operat
a decisive factor in the Socialist transformation of the
Bulgarian countryside.

The third stage in the development of the MTS's bega
1950, when they were put under state financing. The art
emphasizes that the previous method of financing, which
had favored the rapid development and strengthening of
MTS's, is now beginning to hinder their further organiz
tional-economic consolidation, is leading in several cas
to complacency among managers and workers and to irresponsibility in the utilization of resources. Unfortuna
the author draws no conclusions from this and offers no
recommendations regarding the stiffening of financial d
cipline in the MTS's. In the meantime, it seems to us t
further successes in the organizational-economic conso
tion of the MTS's may be achieved through their gradua
withdrawal from state financing.

The article devotes considerable attention to the MTS
as a factor in the Socialist reform of agriculture and th
organizational-economic consolidation of the TKZKh's.
shows how they have become more important contribut
to the consolidation and development of the TKZKh's in
proportion as they have developed and stabilized, and a
their operations have improved. Whereas, in 1948, the
MTS's performed 8 types of agricultural operations of
overall volume of 6 million decares of soft tillage, in 1
they were already performing 17 types of agricultural
ations with an overall volume of 18 million decares of
tillage and, in 1952, 80 types of operations, the overall
volume of which reached 72 million decares of soft till
Basic field operations on the TKZKh have been mechan
by 70 per cent. In 1956, almost all deep tillage on the
TKZKh's was carried out by MTS machines, the spring
sowing was 78.9 per cent mechanized, cultivation 95 pe
cent mechanized, etc. The MTS's are extending their m
anization of operations to livestock breeding and to the
raising of industrial crops.

However, there are inadequacies in the work of the M
The articles by Konstantinov and Minchev adduce a lar
volume of factual material to show that much remains
could be done to improve the productive activity of the
MTS's. These inadequacies relate above all to the bett
utilization of MTS rolling stock, improved quality of jo

formance, reduction of tractor operation costs, etc.
The state farms are of great significance for the Socialist
orm of agriculture. An article by V. Mishev and V. Mat-
ev, "Increasing the Profitability of State Farms," de-
ribes the development of the GZKh in Bulgaria, explains
ir tasks and gives a detailed analysis of the principal
ys of increasing the profitability of the GZKh.
The collection under review is not without certain faults.
e that should be mentioned is the absence of an article
the distribution of the produce and profits of the coopera-
e. As is well known, the distribution of cooperative prof-
is subject to a variety of local conditions peculiar to the
ples democracies, Bulgaria included. The collection
ght likewise to have included an article on the improved
lfare of the Bulgarian peasantry.
As a whole, the collection unquestionably merits favorable
tice; it incorporates a large amount of material reflect-
the triumph of Lenin's cooperative plan in Bulgaria and
the policies of the Bulgarian Communist Party.

Balash, "Toward a Marxist Critique of Keynesianism,"
te Political Publishing House, 1958, 220 pp.)

The author subjects the main propositions of the Keynesian
ory of reproduction to a critical analysis and reveals the
i-scientific character of the Keynesian explanation of the
ises of crises and mass unemployment under capitalism.
e study shows the apologetic character of the Keynesian
cepts of employment, consumer demand and capital in-
tment. E. Balash emphasizes the urgency of the struggle
inst Keynesianism at the present stage.

FOOTNOTES

Rabotnichesko Delo, September 7, 1957.
Kommunist, No. 8, 1958, p. 67.
Ibid., pp. 68-69.
Pravda, February 6, 1958.
Rabotnichesko Delo, December 3, 1957.
In 1958, the holdings of the TKZKh's averaged 1,200 hectares (Rabotnichesko Delo, September 5, 1958).
Rabotnichesko Delo, December 3, 1957.

ew Economic Literature in the umanian People's Republic

ademician V. T. Malinskii, "Marxism-Leninism and the
arian Question," Publishing House of the Academy of the
anian People's Republic, 1958, 250 pp.)

This work consists of an introduction and six chapters:
he Role and Significance of the Agrarian Question in the
ssics of Marxism-Leninism," "V. I. Lenin's Struggle
Against Revisionism on the Agrarian Question," "The Agrarian Question in Russia and the Agrarian Program of the Communist Party," "The October Revolution and the Agrarian Question in the USSR," "The Significance of Agrarian Reforms in the People's Democracies," and "The Agrarian Question in Capitalist and Colonial Countries."

The author analyzes the essence of the agrarian question at different stages of historical development and the forms of struggle for land in pre-socialist social-economic structures. The study shows the contribution of Marxism-Leninism to the solution of the agrarian question. V. Malinskii expounds the Leninist teaching on the two paths of development of capitalism in agriculture and on the significance of the agrarian question in the bourgeois-democratic and socialist revolutions. The book examines in detail the Leninist analysis of the essence of the agrarian question in Tsarist Russia, the agrarian program of the Communist Party and the Leninist cooperative plan for the socialist transformation of agriculture, as well as the historical experience of collectivization of agriculture in the USSR.

The author shows how the Marxist-Leninist agrarian theory and Soviet experience are being creatively applied in the People's Democracies under the specific conditions of each country.

The last, concluding chapter of the study elucidates the social-economic content of the agrarian question in capitalist and colonial countries, the significance of Marxist-Leninist propositions and the practice of socialist construction in the struggle against revisionism on the agrarian question.

("The Development of the Economy of the Rumanian People's Republic on the Path of Socialism: 1948-1957," Publishing House of the Academy of the Rumanian People's Republic, 1958, 430 pp.)

This annotated edition is a collection of articles by scientific collaborators of the Institute of Economic Research of the Academy of the Rumanian People's Republic. The articles are devoted to questions of the development of individual branches of the national economy of the Rumanian People's Republic during the years of people's-democratic rule.

The introductory article elucidates the social-economic transformation realized in the Rumanian People's Republic after the liberation of the country and the carrying out of the policy of socialist industrialization and production cooperation of peasant households. The following articles analyze questions of the development of individual branches of industry (oil, coal, electric energy, metallurgy, machine building, chemical industry and others), as well as transportation, agriculture, finance and internal and foreign trade.

The concluding chapter examines the growth of national income of the country and the increase, on this basis, of the material well-being and cultural level of the masses.

A. Maklakov:

From the History of Socialist Planning in the Economy of the Chinese People's Republic

The triumph of the peoples' revolution in China, which is an event of importance in the history all mankind, has opened the broadest possibilities for an upsurge in the economy, for a flourshing of national culture, an increase in the material wellbeing of the working people.

The establishment of a peoples' democratic system, and the creation of national public property in the means of production, constituted the foundation of the appearance and the action of the economic laws of socialism in the national economy of China. The Communist Party and the Peoples' Government of China are centering the attention of the government apparatus and of public organizations upon an all-sided study of the effects of these economic laws and also upon a skillful utilization thereof in the interests of a continuous upsurge in the national economy. The triumph of the peoples' democratic revolution has resulted in the appearance and the constant expansion of those functions of the state that have to do with economic organization, culture, and education.

Basing itself upon socialist ownership of the means of production, which creates a field of operation for the law of planned, properly proportioned development of the national economy, the government is establishing in the national economic plans, with due consideration for the concrete conditions of the Chinese Peoples' Republic, the proportions and relationships essential to production, the scale and rates of growth, and the objectives in the field of distribution of social goods and the material resources of the country.

One of the most important expressions of the function of the economic organization of the Peoples' Democratic Government, is the elaboration of long term and current plans of development of the national economy. These plans mobilize the masses of the people and direct their creative activity toward socialist production. The Communist Party and the Peoples' Government of China are involving the masses of the working people on a broad scale in participation in the elaboration of the economic plan. This makes possible utilization of supplementary possibilities and resources for increasing production and overfulfilling the plans, for a more complete accounting of local resources, etc. The wide involvement of the masses of the people in participation and planning, which is an example of application of the principles of democratic centralism in economic upbuilding, creates the conditions for "...complete and unhindered development, not only of local peculiarities, but of local initiative, local example, a variety of paths, methods, and means of moving toward a common goal." (1)

Socialist planning in the Chinese Peoples' Republic is developing and being perfected uninterruptedly on the basis of a creative application by the Communist Party of China of the Marxist-Leninist theory of planning and the experience gained by the Soviet Union in the planning of the national economy.

Organization of planning of the Chinese national econo was approached immediately after the liberation of vari districts of the country from the reactionary Kuomintan regime.

In order to conduct the work of establishing the gover ment economic plan, and to control the fulfillment there and also for the purpose of organizing statistical accoun ing, the Peoples' Government of the Chinese Peoples' R public established central and local planning and statist agencies. During the first years of the Peoples' Govern the agencies serving this purpose were central and local financial and economic committees subordinate respect ly to the Central Peoples' Government and to the local organs of government of large administrative districts, provinces and cities.

In the first important piece of legislation adopted afte liberation of the country, the common program of the Pe ples' Political Consultative Committee of China, there w advanced the objective of developing a general plan for t restoration and development of the major branches of th economy of the Chinese Peoples' Republic in the briefes possible time. To carry out this objective, the financial and economic committee of the government administrat council of the Chinese Peoples' Republic (2) carried out, in conjunction with the industrial ministries, a number o economic conferences at which questions of the status o the various branches of the economy were discussed, an plans for their restoration and development were elaborated. Thus, for example, the Ministry of Heavy Industry and the Ministry of the Fuel Industry employed the mate rials of these conferences to outline the first control fig ures for growth in the production of products, for the vo ume of the works of reconstruction and new constructio and for the dimensions of capital investment, and define the objectives to be met in eliminating existing dispropo tions between the productive capacities of various enter prises, etc.

The Financial and Economic Committee of the Govern ment Administrative Council, with the aid of the planning agencies of the ministries, and also of the financial and economic committees of large administrative districts, elaborated annual control figures for economic plans fo 1951 and 1952 for the government as a whole. These the received the approval of the Government Administrativ Council. On the basis of these control figures, the minis tries compiled plans by provinces and enterprises.

Basing themselves upon the public socialist ownershi of industrial, commercial, and transport property, and also upon the government system of finances and bankin the Peoples' Government began to direct the developme of the government-owned sector of the economy of the Chinese Peoples' Republic, both centrally and locally, i accordance with the objectives set by the National Economic Plan. At the same time, thanks to the leading rol of the public socialist sector of the economy, the People Government was enabled to have an indirect regulating effect (mainly in the sphere of circulation) upon the non socialist sectors of the economy. This was done throug such devices as price policy, taxes, contracts, governm orders, and other economic levers.

The most important principle of the economic policy the government in the period of reconstruction of the na tional economy was:

“The development of production and the establishment of flourishing economy on the basis of the carrying out of a licy of taking into consideration both social and personal terest, benefits both to labor and capital, mutual help of ties and countryside, and the development of trade turn- er, both among the various districts within the country, d with the outside world.” (3)

The reconstruction of the national economy of the coun- y, the strengthening of the socialist sector, and also the cumulated experience of economic administration, made possible to elevate the planning of economic development Peoples' China to a new and higher level. At the end of 52 and the beginning of 1953, the State Planning Committee the Chinese Peoples' Republic came into being, and pro- eded to prepare the draft of the First Five Year Plan for velopment of the national economy of the country.

Government guidance of the planning of the national econ- ny of the country is effected by the All-China Conference Peoples' Representatives; and between sessions, by its anding Committee, and by the Central Peoples' Govern- ent established thereby, the Government Council of the inese Peoples' Republic. In accordance with Article 15 the Constitution of the Chinese Peoples' Republic, the vernment employs the National Economic Plan to guide e development and transformation of the economy, to as- re continuous increase in the force of production for the rpose of improving the material and cultural living stand- d of the people, and of strengthening the independence and curity of the country.

The elaboration of draft plans for the development of the tional economy, and the monitoring of their fulfillment, carried out by the central and local planning organs: the ate Planning Committee of the Chinese Peoples' Repub- , which has authority in regard to long term planning of e national economy; the State Economic Committee, which s authority in current planning of the national economy; e State Technical Committee, which has authority in the anning of new technology in the national economy; plan- ng organs in the provinces, the national autonomous dis- cts, and in the cities; and also planning committees and anning departments of the ministries and bureaus.

The central and local planning organs, and also the plan- ng departments and planning administrations of the min- ries and bureaus, develop plans for the progress of gov- nment, cooperative, and state capitalist sectors of the onomy. In addition, the national economic plans take ac- unt of the development of the private capitalist sector.

In accordance with the main objectives for the period of nsition, as set forth in the Constitution of the Chinese oples' Republic, the national economic plan establishes scales and rates of development of the government and d cooperative sectors of the economy in their various anches; determines the indices for increase in production d in the productivity of labor, and for reduction in cost production, determines the size of capital investments, d the objectives in the direction of the most important in- idual enterprises, etc. After confirmation of the national nomic plans, they are submitted to the appropriate cen- l and local organs of administration for establishing the ectives for the individual economic units (companies d establishments).

The situation with regard to planning of agriculture and handicraft industry, involving over 120 million peasant seholds and about six million handicraftsmen, was dif- ent until quite recently. The forms of planned influence n these branches of the economy changed with changes ocial conditions of the countryside, and in accordance h a gradual transition of individual peasant households and handicraftsmen to social production (organization of groups of mutual labor assistance, and then the development of producers' cooperatives).

The cooperation of peasant households in production made it possible to plan the development of the economies of the cooperatives in accordance with the needs of the country and the interests of the members of the cooperative, rationally to make use of human and material resources at the disposal of the cooperatives, to establish plans for opening virgin soil, plans for irrigation construction, utilization of modern agricultural equipment, and also plans for the development of agricultural production embracing many branches, and founded upon interelation between them. The conversion of the handicraftmen to social production made it possible to expand the planning of production in the handicraftsmen's cooperatives.

In planning the development of agriculture, the government makes wide use of planned purchases of the most important types of agricultural produce (grain, cotton, and oil seeds). This makes it possible to assure stability of prices for the products thus purchased and has a positive effect upon the development of agricultural production. Agricultural production cooperatives and individual peasants, knowing the scope of planned purchases and the government purchase prices, are able to proceed with confidence in developing their own production in accordance with the needs of the government and their own requirements. Regulation of the development of agricultural production and handicraft industry is also effected by the government by means of contracts and credit policy.

Until recently, regulation of the development of private capitalist industry and trade was performed by the government by providing raw materials, and materials for processing to the private enterprises, by offering orders for the manufacture of various products; and by orders for sale of commodities, by tax policy, etc. Later, as capitalist establishments were converted to mixed government-and-capitalist undertakings, the economic activity of private capitalist industry and trade came to be regulated in accordance with the needs of the government by the device of direct planning. In the interests of the most rapid possible development of the economy of the country, the Peoples' Government, proceeding from the dual nature of the national capitalist class of China, guides itself by the policy developed by the Communist Party, of utilizing, limiting, and peaceful converting capitalist industry and trade.

As in the other countries of the socialist camp, the planning of the nationalized economy in China is based on the coordination of long range and current (annual) government plans, which supplement and are interrelated with each other.

The long range plans envisage the execution of the very broadest measures in the development and strengthening of the socialist forms of the economy, establish the necessary relationships in the development of the individual branches of the national economy, with simultaneous development of industry and agriculture, under the condition that heavy industry gets priority development. These plans also determine the objectives in the introduction of advanced technology and rational organization of production, for the purpose of constant increase in the productivity of labor. The long range plans give much attention to questions of correct distribution of the productive forces of the country. As the peoples' democratic system and the socialist forms of the economy grow stronger, the long range system of planning in the Chinese Peoples Republic takes on ever greater significance.

In the organization of long range planning in People's China, the familiar instructions of V. I. Lenin to the effect that it is impossible to work without a plan calculated for a long period of time, and that the individual components of this plan, the plans for the branches of industry, must be strictly coordinated, interrelated, and must together constitute a unified economic plan are taken as basic.

The first Five Year Plan for development of the national economy of the Chinese Peoples Republic, covering the years 1953-57, and adopted by the Second Session of the All-China Conference of Peoples Representatives in June 1955, after wide public discussion, may serve as an example of such a unified economic plan. The first Five Year Plan for the Development of the Peoples Economy of China was of major international significance. It demonstrated to the peoples of countries still under colonial and semi-colonial dependence the grandiose objectives that could be posed and resolved by a people that had been forever freed from colonialism and had become the sole ruler of the country.

The first Five Year Plan developed in connection with the general line of the Chinese Communist Party for the transition period was an important stage in the up-building of socialism in People's China. The major objectives of the Five Year Plan for 1953-57 lay in the development of the primary base of socialist industrialization of People's China, a primary base for the realization of socialist transformations in agriculture and handicraft industry by the development of agricultural producers cooperatives (based in part upon collective ownership), and cooperatives of artisans in the creation of the primary base for socialist transformation of private industry and commerce, by conversion of the majority of private industrial and commercial enterprises to state capitalist enterprises.

The dimension of the capital investments for economic and cultural upbuilding testified to the grandiose objectives of the first Five Year Plan. Capital investments on this scale were inconceivable for China in the past and became possible only after the victory and strengthening of the people's democratic system in the country. The plan for capital construction provided for 42.7 billion yuan of investment. In actuality, these appropriations, during the Five Year Plan, came (in accordance with preliminary data) to 48.8 billion yuan; or, in other words, 114.1 per cent of the planned objective. The first Five Year Plan envisaged construction of 694 industrial undertakings of prime importance. By 1957, the number of undertakings under construction, or being rebuilt, came to 825, of which 449 were already in operation in whole or in part.

In the field of industry, the major objectives of the first Five Year Plan, consisted in giving priority development to heavy industry: ferrous and non-ferrous metallurgy, petroleum, coal, electric power, and the creation of a native and modern machine-building industry. As a result of the realization of the first Five Year Plan, the foundation for the development of a native machine building industry, which is the basic essential for heavy industry, has already been established in the Chinese Peoples Republic, and major centers of machine building have been created and continue to be built in districts of north, central, and southwest China.

Along with the development of industry under the control of the central government, there has been considerable development of local and handicraft industry, with the object of satisfying the growing needs of the population of city and countryside for consumer goods and materials of production.

The first Five Year Plan proposed an increase in the value of industrial production as a whole of 98.3 per cent in 1957 over 1952, and of modern industry, by 104.1 per cent. In reality, the gross production of industry increased by 132.5 per cent during these years of the Five Year Pl The rapid rates of growth of industry during the first Fi Year Plan, and particularly of heavy industry, reflect th advantages of the people's democratic system and the so cialist nature of the development of industry in China.

During the years of the first Five Year Plan, measure of broad scope have been carried out for raising the tec nical level of industrial production in every possible wa primarily by improving the available machinery and equ ment, by introducing the most advanced processes of pr duction, by mechanization and automation of a number o production processes, by more rational and complete uti zation of the available resources of raw and other mate and by uninterrupted increase in the output of, and impr ment in the quality of the products. With the object of as suring successful development of industry, the governm has carried out a major work in improving the administ tion of industrial enterprises, has introduced cost accou ing, and has developed the activity and creative initiativ of the broad masses of the working people in every possible way.

One of the most important objectives of the first Five Year Plan for the development of the national economy the Chinese Peoples Republic was overcoming the lag in the development of agriculture behind that of industry. the past, during the period of rule by the Kuomintang, agri not only did not develop, but on the contrary, underwent backward development. During the first Five Year Plan the planned rise in the forces of production and agricult was based primarily on systematic development of agric tural productive cooperation and also upon expansion of network of state owned farms and machine and tractor s tions. More progressive methods of organization of pr duction, more modern machinery and equipment, were disseminated in agriculture, and irrigation undertakings were carried out on a large scale. Modern agricultural technique and veterinary techniques were gradually intr duced into production. The objectives of the first Five Year Plan in the field of the socialist transformation of agriculture, of private capitalist industry and trade, wer considerably overfulfilled.

The first Five Year Plan of development of the nation economy of the Chinese Peoples Republic was compiled due consideration of the economic and scientific and tec cal aid available from the Soviet Union and the lands of peoples' democracy. The organization of planning opera tions in the Chinese Peoples Republic was assisted sign icantly by Soviet Specialists, with their many years of perience in planning the economy in the USSR.

The assistance and experience of the countries of the socialist camp made it possible for Peoples China succ fully to develop its national economy and to carry out so ist industrialization with minimum outlay of forces and

The rising role of long range economic planning in th Chinese Peoples Republic found expression in the drafts the fundamental propositions for a Twelve Year Plan fo development of agriculture covering the years 1956-67. This draft economic plan was developed by the Central mittee of the Communist Party of China and discussed the Supreme Government Conference of the Chinese Pe Republic at the end of January 1956 and was then dispat for examination by Party committees in the provinces, cities, and autonomous districts, regions, countries and townships, and also by the appropriate agencies. Ascri primary significance to the creative activity of the peopl in the field of national economic planning, the Central C mittee of the Chinese Communist Party adopted a resol tion to the effect that broad public discussion of the dra an was essential. This would facilitate the elaboration of rrent plans for the development of agriculture by prov- ce, region, county, and township, in accordance with the al situation.

In October 1957, the revised draft of the plan was pub- shed for general discussion. At the second session of the ghth All-China Congress of the Chinese Communist Par- (May 1958), changes and additions were made in the aft plan. After discussion and approval of the draft plan the government committee, it will be submitted for final proval by the next session of the All-China Conference of eoples' Representatives.

The draft plan defines the perspectives for development agriculture in China for a longer period and the direction the work of the Chinese Communist Party and the gov- nment of the Chinese Peoples Republic in the further re- ganization of the Chinese countryside in accordance with e requirements of socialist construction. The plan en- sages the organizational and economic strengthening of ricultural production cooperatives, outlines concrete easures for increase in production of food and other ops, for the development of agriculture, for the introduc- on into agriculture of modern technology and the achieve- ents of agricultural science, with the object of increasing e crop yield in agricultural crops, and also provides fur- er progress in irrigation construction and drainage work, restry plantings, the opening of virgin soil, the construc- on of government owned farms, the strengthening of ientific research work in agriculture, and the carrying t, on a large scale, of work to improve living conditions d conditions of sanitation in the countryside.

The plan for control of the Huang-ho River, adopted in ly 1955 by the Second Session of the All-China Conference Peoples' Representatives, envisaging grandiose hydraul- engineering construction on this river, and other work r its regulation in complex fashion, as well as the pro- sals of the Central Committee of the Chinese Communist rty relative to the second Five Year Plan for the develop- ent of the national economy of the Chinese Peoples Repub- for 1958-1962, adopted by the Eighth All-China Congress the Chinese Communist Party, bear witness to the fur- er development of long range economic planning in the untry.

The proposals for the second Five Year Plan of develop- ent of the national economy of the Chinese Peoples Repub- constitute a new grandiose program for the further building of socialism in the country, on the basis of ma- successes achieved in economic upbuilding during the ars of the first Five Year Plan. The fundamental objec- es of this program lie in continuing the development of lustry, chiefly of the branches producing the means of oduction, and of proceeding with further technical re- nstruction of the national economy, of expanding and engthening public socialist ownership, of assuring further lift in the material and cultural standard of life of the ople, and of strengthening the country's defense capacity.

Elaboration of the second Five Year Plan of development the economy of the Chinese Peoples Republic has not been completed. In accordance with proposals advanced the First Session of the All-China Congress of the Chi- se Communist Party, it is proposed by the end of the cond Five Year Plan to increase the output of electrical wer to 43 billion kilowatt hours, of coal to 210 million s; of steel to 12 million tons, of cement to 14.5 million s, and of chemical fertilizers to 3.2 million tons. Major ectives of the second Five Year Plan in agriculture are resented by the proposed development of the output of d crops, in order "to provide a spur to the development of agriculture as a whole;" with a simultaneous broad development of the production of industrial crops, particularly of cotton, oil producing plants, tobacco, jute, and tea. At the first session of the Eighth All-China Congress of the Chinese Communist Party, a proposal was introduced to increase the production of grain crops in the last years of the second Five Year Plan to 250 million tons, and of cotton, to 2,400,000 tons.

The movement for improvement in style of work, and the routing of the right wing capitalist elements, made it possible for the Chinese people to achieve new successes in the development of production. As a result of the exceptionally rapid rates of growth, gross production of industry during eight months of 1958 rose by 47 per cent over the corresponding period of the preceding year. The rate of growth of production exceeded the rates of growth of previous years and the rates of growth envisaged by the plan. The production of electrical energy in the months of January through June 1958 was 30 per cent higher than in the corresponding period of the preceding year. Coal output was 46 per cent higher, petroleum 32 per cent higher, pig iron production 33 per cent higher, steel 26 per cent higher, nitrate fertilizers 65 per cent higher, machine tools almost twice as high, electric motors more than twice as high. The total volume of capital investment for January through June 1958 exceeded the level of the corresponding period of the preceding year by 88.1 per cent. Major successes were attained during this period by the agricultural production cooperatives. The collection of grain from the summer crop came to approximately 50.5 million tons, or 69 per cent more than the crop of 1957.

All these achievements bear witness to the enormous labor upsurge on the part of the broad masses of the people, and their effort to attain a flourishing of the economy of their country in the briefest possible time.

The successes in the development of industry and other branches of the national economy, the presence of endless resources of natural material resources and labor, made it possible for the Communist Party and the Peoples Government of China to pose a new undertaking before the working people of the Chinese Peoples Republic, that of catching up with and surpassing England in the production of pig iron, steel, and other most important forms of industrial production within fifteen years or less. This is a shining example of the bold daring of the Chinese people in the successful competition of the socialist system of economy with the capitalist.

The economic upsurge which the country is going through at the present time provides the foundation for asserting even today that the production indices outlined by the Eighth All-China Congress of the Chinese Communist Party will be exceeded.

On November 14, 1957, the Standing Committee of the All-China Conference of Peoples Representatives approved a resolution of the Governing Committee of the Chinese Peoples Republic on improving the system of administration of industry, commerce, and finance. These resolutions are of significance for rapid development of production and successful fulfillment of the government's plan for the national economy.

With the object of further development of the initiative and creativity of the masses of the people, in accordance with the principles of democratic centralism, the resolutions of the Governing Committee of the Chinese Peoples' Republic have extended the rights of local agencies of administration, of plants, factories, and mines, in the administration of industry, commerce, and finance. Also expanded have been the rights of local peoples' committees in the field of distribution of resources of material wealth, etc. In accordance with these resolutions, the bulk of the enterprises in the light and food industries have been transferred to administration of the provinces, towns, and autonomous districts. Local organs of administration have also been given control of enterprises in heavy industry, with the exception of those in which the techniques of production are complex, and those engaged in experimental production. These remain in the hands of the central organs (but local agencies are allowed to monitor their activities).

As of the middle of June 1958, 80 per cent of all enterprises and offices that had been controlled by the industrial ministries, had been turned over to the local organs of government.

In accordance with the resolutions of the government committee, control over industrial production has also been limited. Instead of 12 indices of planning that had to be reported on, as established by the government committee, only four remain, to wit:

volume of production of the major forms of products;
the total number of workers and employees;
the total wage and salary payments; and
the profits.

The reorganization of the system of administration of industry, finances, and commerce, considerably increased the responsibility of local agencies in the planning of the national economy. A new system of administration will facilitate a more efficient utilization of productive capacities on the spot and will give rise to a new upsurge in the economy of the Chinese Peoples Republic.

With the object of increasing the level of socialist planning, the planning agencies of the Chinese Peoples Republic give much attention to improving their methods of work in the field of compiling plans for the development of the national economy, and for reinforcing statistical accounting.

The government economic organs of the Chinese Peoples Republic, the State Planning Commission, and the State Economic Committee, in conjunction with the central ministries and bureaus, and also with the local planning agencies, undertake an annual review of the major indices of the national economic plans and elaborate the methods whereby accounting for planning is properly founded in consideration of engineering and economics, and also set up time goals for the national economic plans in accordance with directives from the government council.

In elaborating the government plans, the method of balances is coming into ever wider use. This method assures coordination and proper relationships between the plans for the development of the various branches of production, and of all aspects of social reproduction. From year to year, the quality of the compilations of the most important balances of materials and other economic accounting improves. And this makes it possible for the State Planning Committee and the State Economic Committee to determine the basic needs of the national economy in conjunction with the fundamental requirements of the plans and also, more completely to discover resources and sources for meeting these needs, and more exactly to set forth the proportions to obtain in the development of the various branches of the economy.

The use of a system of balances, and other economic types of accounting, makes it possible for the central and local planning organs of Peoples China, in elaborating the national economic plans, to determine the necessary rates of growth and the level of production and consumption, to find reserve productive capacities, to provide for a continuous increase in labor productivity, and for a constant
improvement in the nateral and cultural living standar
the people. If in elaborating the first plans for the vari
branches, and the plans for the development of the natic
economy of the various large administrative districts,
system of balanced accounts was employed only partiall
today they occupy a major position in the elaboration of
long range and current plans.

In order to arrive at a proper foundation for the draft
the general government economic plans, the planning
agencies elaborate the material balances in the most in
portant areas: ferrous and non-ferrous metals, fuel, el
trical energy, machinery and equipment, chemical prod
building materials, foodstuffs, and industrial consumer
goods, agricultural raw materials, etc.

The pattern of material balances (in kind) employed i
practice of national economic planning in the Chinese
Peoples Republic is founded on the experience of social
planning in the Soviet Union. In the material balances f
the individual types of products, there are shown all av
able resources, with separate indications for productio
import, and other sources, and also with separate indic
tion of incoming residues at the beginning of the year.
heading "Distribution" in these balances, shows the tota
quantity of product distributed, with special indication
that going to the needs of production and operation, capi
construction, market supplies, export and government
serves, as well as outgoing residues at the end of the y
The quantity of product going to meet the needs of prod
tion and operational requirements, and of capital constr
tion, is determined on the basis of needs, and in accord
with unit standards of expenditure, which, in turn, depe
upon the nature of consumption. For example, in the ba
ances for fuel, this quantity of product is determined in
accordance with the standards of consumption for the m
facture of one kilowatt hour of electric power, the smel
ing of one ton of pig iron, steel, etc. In the balances fo
agricultural raw materials, it is done on the basis of
standards of consumption for production of a specific a-
mount of yarn, fabrics, sugar, etc; in the balances for
building materials, on the basis of engineering plans an
calculations for construction sites.

In the planning organs of the Chinese Peoples Republ
improvement of the level of work on balances is accom-
panied by an all round effort to provide a scientific fou
tion for the balances thus elaborated. Thus, for exampl
during the last few years, the planning agencies of the
Chinese Peoples Republic have carried out a major wo
(a work that is still continuing), in compiling scientific
founded standards for consumption of raw materials, o
materials, fuels, and electrical power in the national e
omy. This has made it possible to apply more specific
methods of determining the requirements for means of
production and consumer products by means of what is
called "direct counting," instead of general estimates a
sample calculations.

During the first Five Year Plan, when the state plans
for the development of the national economy were comp
the most important technical and economic indices and
calculations of utilization of productive capacities (bal
by branch of industry, came into wide use. This made
possible for the planning agencies to discover specific
in terms of individual branches of industry and enterp
available reserves of productive capacity, and to outlin
measures for more rational utilization of enterprise c
ity to meet government orders.

The planning of agriculture, of handicraft industry, o
transportation, trade, labor, prices and costs, finances
and cultural upbuilding, is today conducted on a higher

vel. The central and local planning agencies of the Chise Peoples' Republic, in developing plans for the various anches of the economy and the overall economic plans, ake ever greater use of cost and monetary balances and various financial and economic calculations.

The Central Committee of the Chinese Communist Party d the Government Committee of the Chinese Peoples public ascribe great importance to further improvement the planning of agriculture. The directives of the Central mmittee of the Chinese Communist Party and the Govnment Council of the Chinese Peoples Republic of Septemr 12, 1956, on strengthening leadership of productive acities, and the organizational arrangements in agricultural oductive cooperatives, pointed to the need for planned delopment of production in the cooperatives, for careful aboration and all round coordination of plans, for wide lization of local possibilities and the development of initive in the elaboration of the plans.

“Agricultural production cooperatives,” it states in these rectives; “may develop cooperative-wide production ans, guiding themselves by the needs and possiities, but on the condition that these plans provide at these cooperatives pay the state the agriculral tax and that they carry out the assignments r agricultural production they have received r centralized purchases, and also that they obrve contractual obligations they have undertaken with e economic agencies.” (4)

In developing long range and current annual plans for the velopment of agricultural production, indices of growth production in the most important fields (horticulture and estock raising), and indices of the government owned rms and machine and tractor stations are coming into de use.

In the plans with regard to labor, the number of workers d office personnel and the wage fund are calculated for e major branches of the national economy, and assignents for labor productivity and the training of skilled rkers are made for each of the most important ministries, reaus, etc.

Much attention in the elaboration of the national economplans is given to engineering and economic calculations costs of production and circulation, and to the financial n. Analysis of cost of industrial production is based on ts of expenditures for production and calculations of duction in the cost of comparable commodity production industries and bureaus. Serious analytical work is being rformed in planning costs of circulation and in deterning planned assignments for reducing the cost of capital lays.

The financial plan of the Chinese Peoples' Republic kes it possible to coordinate quantitative assignments d indices in the national economic plan with the existing ancial possibilities. In the development of such a plan, ailed calculations are made of income to the government mmercial, industrial, and agricultural taxes, contribuns from profits and amortization in the government ned sector of the economy, and income from government ns). Detailed analyses are made of expenditures for onomic construction by the various ministries and buus, and a search is made for possible reserves in the onomizing of government funds, etc.

With the object of studying the increase in monetary inme and the rising demands on the part of the population consumer goods, use is made of balance calculations of monetary income and expenditures of the population.

The Communist Party and the Peoples' Government of na are constantly concerned with enforcing the agencies of planning and statistics, with improving the organization of the planning of the national economy, and with control over the course of the fulfillment of the plans.

The Eighth All-China Congress of the Chinese Communist Party gave much attention to the further development of socialist planning in China. The reports and speeches by the delegates to the Congress dealt broadly with the most important problems of planning, with measures for improving all round complex planning and improvement in methods of elaborating long range and current government plans.

It was noted at the Congress that in order to improve the level of economic planning, it is necessary to make a profound study of, and to discover the special features of the economy of various districts and branches of the economy, to strengthen the connections existing between personnel of the planning agencies and broad masses of the working people. That is, to pursue a “mass line,” to accumulate fundamental statistical and other data for reports necessary to the compilation of plans, and to monitoring their fulfillment.

The Congress posed the following objectives before the agencies of planning and economic administration:

to study Marxist-Leninist political economy;

to investigage the state of the economy and the perspectives of development of its branches and districts;

to find reserves for increasing production, and to find “bottlenecks” in the various branches and regions;

to generalize and introduce advanced experience in the field of production and construction.

The Congress pointed to the need to improve the method of balances in planning, and to assure that the planning of the national economy is all-sided and interrelated, as is the planning of capital investments. The Congress underlined the high significance of organizing monitoring of the fulfillment of plans and discovery of reserves in the national economy.

The central government economic agencies of the Chinese Peoples' Republic, the State Planning Committee, the State Economic Committee and the State Statistical Administration periodically convene China-wide planning and statistical conferences on the basis of which a broad discussion of current problems, of more profound organization of planning and accounting in the national economy, and of improvement of the work in local planning and statistical agencies, and of stabilization of their personnel, are discussed. The publications of the State Planning Commission of the Chinese Peoples' Republic (The Planned Economy, etc.) engage in a broad range of discussion of problems of planning and thus facilitate improvement of the level on which the planning is conducted.

It would, however, be incorrect to hold that there are no difficulties or shortcomings along the path of socialist planning of the national economy in the Chinese Peoples' Republic. The Chairman of the State Planning Commission of the Chinese Peoples' Republic, Comrade Li Fu-chun, remarked at the Eighth All-China Congress of the Chinese Communist Party:

“Our planning has not embraced all areas that it should have; it has been imprecise. It has not been flexible. It has not been farsighted. These shortcomings reflect in concentrated form the fact that in elaboration of the plans, our subjective consciousness differed from objective reality.”(5)

The planning agencies of the Chinese Peoples' Republic, as has been shown by the experience of the years gone by, are successfully overcoming these shortcomings, and eliminating their failings. They are making an ever deeper study of the national economy, are constantly accumulating economic and other basic data, are studying and generalizing the most progressive methods of socialist planning in the Soviet Union and the methods of planning in the national economy of other countries of national peoples' democracy.

The constant reinforcement of the socialist economy of the Chinese Peoples' Republic, the mighty upsurge of its industry and agriculture, the broad development of local industry, and the creation of peoples' communes, will naturally require further improvement in the system of national economic planning in the Chinese Peoples' Republic.

The Communist Party and the Peoples' Government of China, guided by Marxist-Leninist theory and the experience of the upbuilding of socialism in the USSR, and also taking into consideration the concrete conditions of the country, are making maximum employment of the advantages of the socialist system of economy, are creatively applying the concepts of Marxism-Leninism to the process of the upbuilding of the socialist society. A clear example of this creative application of Marxism-Leninist theory to the practice of the upbuilding of socialism is the elaborati by the Chinese Communist Party, and the carrying out life, of the general line adopted at the Second Session c Eighth All-China Congress of the Communist Party of

"To concentrate all efforts to strive forward, and to build socialism on the principle of more, faster, better cheaper."

FOOTNOTES

(1) V. I. Lenin, Collected Works, Vol. 27, p. 181 (Russ edition).

(2) Now the State Council of the Chinese Peoples' Repu

(3) Common Program of the Peoples' Consultative Con tee of China, State Political Press, 1950, pp. 12-13 (Russian edition).

(4) Sin'khuaban'yuekan', No. 19, 1956, p. 55.

(5) Sin'khuaban'yuekan',No. 21, 1956, p. 105.

Lakhman:*

Wrong Treatment of the Question of abor Productivity Under Socialism

he magazine Problems of Philosophy, No. 6, for 1958, ries in its department "Answers to Readers' Questions," article by B. A. Rachkov, entitled "Productive Labor ler the Conditions of Socialism," stating at the outset of article that in determining the essence of the concepts of ductive and non-productive labor, of socially necessary or and the like, the philosophical and economic literature not always clear. The author attempts to give his inter- tation of these questions. It must be said, however, that article does not only not assist the reader more clearly nderstand the essence of the categories under examina- , but, on the contrary, introduces confusion into ques- s that have already had adequate clarification and elabo- ion in our literature.

omrade Rachkov makes a completely unfounded distinc- n between the concepts of material production and produc- e labor. He holds that, under socialism, "All labor in field of material and spiritual production..." will be pro- tive.*

n accordance with this conception, the author includes productive workers not only all participants in the pro- tion of material values but persons active in science and , persons engaged in the training of children, teaching, ernment administration, etc.

B. A. Rachkov attempts to reinforce his position on the tter of productive labor under socialism by the concept productive labor may be defined differently in different ial orders.

here is, of course, no argument over the fact that the cept of productive labor develops and becomes richer uman society develops. Thus, the cooperative nature he labor process, Marx noted, expands the concept of ductive labor, and of the bearer thereof — the produc- worker. Under conditions of a highly developed divi- of labor and coordination of labor, it is not necessary rder to be a productive worker directly to apply one's ds to the work, but merely to be an agency of the collec- worker, and to carry out one of his functions. There is no question of the fact that the social nature of produc- labor differs in different social and economic systems. concept of productive labor includes not only the rela- ships between the activity of the worker and its useful cts, but also specific social relationships of production. s, under capitalism, the social nature of productive la- lies in the fact that the worker creates surplus value, h is appropriated without equivalent by the owner of the ns of production. Contrary to capitalism, in socialist ety productive labor is labor which is free of exploita- The national income created thereby belongs to the king people, and to them alone.

owever, a specific social characterization of productive r may be made only after its fundamental identifying nature, which exists under all social formations, has been defined. This characteristic of productive labor is its participation in the production of material goods.

"The difference between the worker living from capital, and the worker living from income," wrote Marx, "relates to the form of labor. This is the entire difference between the capitalist and non-capitalist methods of production. But productive labor in a narrower sense is any labor going into the production of a commodity, whatever it may be — physical or otherwise — and consequently including scientific labor... Unproductive labor is, in this sense, labor which does not go into the production of a commodity, labor the object and purpose of which is not the production of a commodity. This differentiation must be adhered to, and the fact that all other types of activity in turn affect material production, and vice versa, changes nothing whatever in the need for this differentiation."*

Thus, according to Marx, productive labor is labor participating in the creation of material goods. The functioning of productive labor is the process of material production.

Comrade Rachkov attempts to prove that Marx believed that for capitalist production it is not only the labor of direct participants in the production of material goods that is productive, but the labor of writers, scientists, musicians, physicians, and so forth if they work for wages for capitalists and create surplus value for them. To cite Marx in this fashion is unjustified.

In making an all-sided examination of the problem of productive labor under capitalism, Marx pointed out that it is necessary to differentiate productive labor "from the point of view of the possessor of money — the capitalist" and productive labor as an objective category of social production. "Only bourgeois narrowness of view," he wrote, "which holds capitalist forms of production to be absolute forms, and consequently, the sole eternal forms of production, can possibly confuse the question of what constitutes productive labor from the point of view of capital, with the question of what kind of labor is in general productive..."†

In expanding the limits of productive labor to infinity, B. A. Rachkov confuses two different concepts: productive labor and socially necessary socially useful labor. In any society, a given portion of the labor force is occupied outside material production in carrying out socially necessary functions. In socialist society, such people include for example workers in the field of education, in public health, art, administration, etc. The work of all these categories of persons is necessary to the process of expanded socialist reproduction, to the successful expansion of the economy and the culture of the country. But this labor acts upon production not in a direct, but in an indirect fashion. And labor participating in production indirectly, Marx emphasized, is that which we term unproductive labor.‡

It should be noted that Comrade Rachkov speaks in his article of material and spiritual production. He notes the significance that the increase of a number of persons engaged directly in the production of material goods possesses for socialist society. However, the fundamental position of the

---

oblems of Philosophy, No. 6, 1958, p. 187.

* Karl Marx, Theories of Surplus Value, Vol. 3, 1936, pp. 316-317 (Russian edition).

† Ibid, Part I, 1955, p. 377.

‡ Ibid, p. 270.

author, who strives to prove that all labor is productive under socialism, is not in accordance with these correct propositions. Essentially, Comrade Rachkov wipes out the line of demarcation between the productive and unproductive spheres, separates the sources of national income and the social product from material production.

A precise delimitation of the two spheres of activity of the personnel of socialist society is of extraordinary theoretical and practical importance. This delimitation rests on the Marxist concept that the productive sphere comprises the material foundation of society, and the unproductive sphere merely reflects the direct process of production which, in the former sphere, creates social product in the national income, while the second merely consumes that which has been created in material production.

Soviet economists make precisely this differentiation between the productive and unproductive spheres, on the basis of Marxist-Leninist theory; differentiating between productive and unproductive labor. It is true that there are definite differences of opinion in our literature with regard to specific special problems of concrete differentiation of these two spheres. For example, still a matter of dispute is the question of where to assign passenger transportation and communications for purposes other than production, to the departments of material production or to the unproductive sphere. Nor have certain other questions been adequately elaborated. Further discussion, and a more profound elaboration of this problem, is doubtless of considerable importance, as it will facilitate a more correct distribution of the labor force among the branches of social labor, will make for some precise planning and calculation of the volume of the social product in the national economy that has a better foundation in economics, i.e., in the long run it will increase the economic efficiency of utilization of the total labor of socialist society. However, the article of Comrade Rachkov does not fall into the category of public expressions assisting a more profound clarification of the essence of productive and unproductive labor under socialism. It cannot be deemed to be anything other than a step backward when compared to those made by Soviet economic science and economic practice in the elaboration of these problems.

L. Khokhlov:

For Improving the System of Clearings in the National Economy

The national economy of our country daily witnesses an enormous number of operations of settling of accounts, in sums totalling billions of rubles. As the economy of our country develops, the volume of settling of accounts for commodities and material values and productive services increases.

A further improvement in the organization of settlement of accounts between suppliers and purchasers is of major importance to the national economy. A precise and simple system of settlement of accounts would make for acceleration of turnover of the property of enterprises in the field of circulation, a reduction of the number of defaulters and of the total sum of mutual defaults, a correct sequence of satisfaction of demands for accountings, a reduction in unproductive expenditures on the part of enterprises having to do with payment of interest on overdue loans and penalties levied upon suppliers for delayed payments, facilitation and simplification of the functioning of enterprises, economic organizations, and banking institutions in the mulation of accounting documentation, etc. The problem improving the organization of settlement of accounts is ticularly pressing at the present time in connection with reorganization of the administration of industry and construction and transition to decentralized payment in the budgets of the enterprises themselves.

After the credit reform carried out at the beginning o 1930's, the predominant form of accounting in the overa turnover of payments came to be collector operations, b on acceptance by the purchaser of payment documents p sented by the supplier. The proportion of all other type payment of accounts (letters of credit, special accounts, orders of payment, etc.) in the total turnover of paymen was exceedingly insignificant. Experience showed that a countings based on the principle of acceptances, when th initiative in drafting the document of payment rests with supplier, has completely justified itself.

In the years prior to the Great Patriotic War, and par ularly in the post-war years, a system of accounting ba on clearances effected through clearance bureaus was i troduced widely at the initiative of the administration of State Bank of the USSR. This system of accounting was based on the principle of subsequent acceptance of the p ment document presented by the supplier. The right to r fuse payment of an invoice if the supplier violated a con or the conditions of delivery was retained by the payer i such violations were found even after the account had be presented.

The organization of the clearance bureaus made for a separation of accountings for material goods and servic from other operations carried out by accounting calcula When necessary, participants in the clearance bureaus given bank credits in order to clear their accounts. The system of accounting through clearance bureaus facilita a reduction in the number of defaulters and a reduction the level of mutual defaults, speeded the turnover of fun (in connection with employment of subsequent acceptanc of invoices), and simplified documentation as the suppli did not have to make out invoices for each separate ship ment, but merely delivered bills to the clearance burea total accountings.

The system of accountings through the clearance bure did, however, have certain negative aspects. In particul this system did not make for prompt payment by out-of- town suppliers. In view of the shortcomings of the syste of clearance bureaus, and also the lack of prospects for further development thereof, the State Bank came to the conclusion that this system is not capable of making for further improvement of the settling of accounts based o mutual clearance of payment obligations. Both the local clearance bureaus (at the offices and branches of the St Bank), and the central bureaus (at the State Bank admin tration) were liquidated, and the major forms of cleara of mutual obligations came to be decentralized clearing counts carried out at the site of the purchaser's accoun office.

The essence of this system reduces to the fact that a countings for material values and services are separat from other types of payments. Payment for accepted bi by suppliers is performed not from the general account from a special personal account opened for each partic in the clearing system. Periodically, once every three, or seven days, depending upon the branch of industry, t mutual claims of business agencies for payments for m rial goods and services rendered are cleared from thes accounts. If, during this period, the income to the spec

rsonal account from sales exceeds payments from this ac-
int, the difference is transferred to the general books. If,
vever, the payment exceeded income from sales, and the
neral books do not show funds to cover the difference, the
nk issues a credit for settlement for up to twenty days, on
ndition that the enterprise receiving the credit is not more
n ten days in arrears of the bank loans, or thirty days in
case of particularly well functioning enterprises.

The peculiarities of the present system of decentralized
aring accounts have been illuminated in an article by V.
rashchenko, titled "Clearing Accounts in a Socialist Econ-
y," (*Problems of Economics*, No. 3, 1957). Unfortunately,
s article failed to deal with certain exceedingly important
ortcomings of the system of decentralized clearings, and
advantages were exaggerated in certain respects. Experi-
ce shows that a further improvement of the system of
intenance of accounts between business institutions is
cessary.

Soviet law has established the following sequence for
eting claims upon current books: wage payments, pay-
nts to the treasury, and in third priority, satisfaction of
claims of suppliers. The establishment of a special per-
nal account, containing a portion of the funds of an enter-
se for decentralized clearance, means that these funds
e expended solely to pay for commodities provided by sup-
ers, regardless of the state of the accounts of the given
erprise in terms of payment of wages and payments to the
asury. This procedure for meeting the demands of sup-
ers, in conjunction with the provision of bank credit for
aring accounts with suppliers, is, in the opinion of ad-
ents of the present system, not only not in contradiction
h the legal sequence of payments, but on the contrary,
ps its observance, inasmuch as the suppliers themselves
e obligations to meet in terms of wages and to the
asury; and in order to fulfill them must receive prompt
ment of sums of money coming to them for commodities
d. The very idea of the need to assure uninterrupted and
mpt payment for supplies is correct, but the form of ac-
nting selected for this purpose (through special personal
ounts) is, in our opinion, excessively clumsy and expen-
e.

t should be emphasized at the outset that clearance of
tual obligations does not at all assume the need that a
tion of the funds of an enterprise be assigned to a spe-
personal account for clearing purposes. The meeting
nutual claims is actually carried out by clearing even
ases when payments to suppliers and receipt of funds
m sales are performed through the general books. The
erence in accounting by means of a special personal ac-
nt and by means of the general books does not at all lie
he fact that in the first instance you have a clearance of
ual obligations and that this does not occur in the sec-
. The difference lies, in the first place, in the fact that
meeting of accounts on the basis of personal accounts is
ered by bank credit, while when it is taken care of
ugh the general books, no such credits are issued. The
ond feature of the existing system of payments is, as
been noted above, the fact that it makes it possible to
ct all or a portion of income to meeting the demands
uppliers, bypassing the general books, and thus inde-
dent of the situation as regards wages and payment to
treasury. Finally, in the third place, clearance of mu-
obligations by means of special personal accounts is
ried out periodically — once every three, five, or seven
— while when they are done through the general books,
actually is done daily.

omrade Gerashchenko observes in his article that the
amental index of the economic efficiency of clearing accounts, based on elimination of mutual obligations, is the share of mutually cleared payments in the total sum of turnover of payments. In 1955, this came to 51.5 per cent and in 1956 to 63.7 per cent of the total. Examination of these data necessitates however that the following be borne in mind. In the first place, analysis of payment relationships of many enterprises shows that if the intake of funds and their expenditures were completely reflected in the general books, the share of cleared payments would be even higher. In the second place, the high percentage of mutual claims under the existing system of clearing accounts is due to the fact that the funds for sale of products arriving from merchandising organizations not participating in decentralized clearances do not go into the general books of enterprises in the light and foodstuffs industries but to their personal accounts for the decentralized clearing system.

Comrade Gerashchenko emphasizes that accounts based on clearing mutual obligations in decentralized fashion have made it possible significantly to improve payment discipline in the national economy. No doubt the development of this form of payment has had a significant influence in enforcing payment discipline. To be specific, the provision of bank credits to make payment possible certainly plays a large role. However, in the last few years, the major factors making for reinforcement of payment discipline have been the pronounced improvement in the functioning of all branches of the national economy, and the change in the sequence of payments of invoices presented by suppliers. Comrade Gerashchenko recognizes that it is impossible to create a single system of decentralized accounts as this would reduce the proportion of mutually cleared payments. Consequently, the prospects for further development of decentralized accounting are quite limited. Comrade Gerashchenko also notes that the procedure for clearing accounts is exceedingly complicated. However, the shortcomings of the present forms of clearing are not limited merely to this but are considerably more serious. Decentralized accounts inevitably lead to a slowing of the turnover of funds in the economy, as under conditions in which clearance of mutual obligations is carried out periodically (once every few days), enormous sums of money are frozen in special personal accounts until the dates of payment. Analysis of the movement of funds in the general books and loan accounts for 104 major enterprises of the Latvian Economic Council shows that in the course of a month, as much as 150 million rubles is frozen in the personal accounts of these enterprises.

The advocates of decentralized clearing accounts observe that this system makes it possible to avoid delays in payments to suppliers which would be inevitable if payments were made from the general books after satisfaction of the claims of the wage fund and the treasury. However, a comparison of payments made through special personal accounts and payments made through the books of account is unjustified, inasmuch as in the former instance credits are advanced for the purpose of clearing the accounts, while payments from the payments account may be made only if the firm has liquid funds available, and bank credit plays no part in it. If credits for the clearing of accounts were advanced for payments to be made from payments accounts under the same conditions as those provided for participants in the decentralized system of clearing, the turnover of funds would be accelerated by comparison to the system of payments now in effect, inasmuch as mutual payments are cleared daily in payments accounts, while, in the personal accounts, payments are made once every three, five, or seven days.

Decentralized clearing payments cause direct losses to those enterprises in which money received by the personal accounts from sales considerably exceeds payments from these accounts. Such enterprises not only do not receive the interest they would get if their liquid funds were kept in payment accounts, but themselves pay interest for credits for payment documents en route, while funds belonging to them are held in the personal accounts until the day of clearing. An enterprise, most of whose sales income goes to its payment account, and which pays its bills primarily through personal accounts, profits by participation in the system of clearing accounts. If on the other hand, the income from payments goes primarily to the personal accounts, and the payment of its bills goes primarily through the payments account, this enterprise is in an exceedingly unprofitable position as compared to other participants in the system of decentralized payments. The economically unjustified inequality among various enterprises in the financial and economic sense contradicts the fundamental principles of cost accounting.

The participation of enterprises in a system of clearing accounts leads to a dissipation of their funds among various accounts. The majority of business institutions receive credits in a bank through special loan accounts, and all of them, as a general rule, are at the same time participants in decentralized accounts. These business institutions pay their invoices from three different accounts: the payment account; the special loan account; and the personal account for purposes of decentralized clearing, while their income from sales is entered in two accounts: the payment account, and the personal account for decentralized clearance. Under these conditions, the major account of an enterprise — the payment account — is converted into a subsidiary account, which reflects primarily not operations of payment, but the balance of clearing operations in the personal account.

The system of decentralized clearing accounts inevitably gives rise to violation of the established sequence of payments. It complicates wage payments and payments to the treasury, and also execution of the required procedure for payment to creditors. Under conditions in which the enterprise has been deprived of the right to receive payment credits because it has an outstanding overdue indebtedness to the bank for loans, the sequence of payment of invoices to suppliers does not correspond to the dates of arrival. If income from sales is paid chiefly to the account for decentralized clearing, and invoices from suppliers who are not participants in the clearing system are presented to the payment account, those suppliers who are paid through the decentralized clearing system are the gainers thereby. Contrariwise, if sales income is paid primarily to the payments account, and the invoices of suppliers are presented chiefly to the personal account for decentralized clearing, the suppliers who are paid from the payments account find themselves in a privileged position. However, if the sequence of payment to suppliers was properly straightened out, this would facilitate a reduction in the number of bad debtors; and a reduction in the total level of unpaid bills; and this is of major importance to the national economy.

These shortcomings in payment, based upon clearance of mutual invoices in decentralized fashion, call forth a justified criticism of this form of payment on the part of many personnel of business organizations and of the system of
credit and financing. The shortcomings of this system
been called attention to repeatedly in the press.*

The new order of sequence of payments from paymen
accounts, established September 1, 1954, providing that
creditors be paid after satisfaction of requirements of
wages and the treasury, demands a more rational orga
tion of payment. In our opinion, it would be advisable t
business institutions receiving credits from special loa
accounts pay their invoices through these special loan
counts. These should be merged with the personal acco
for decentralized clearing purposes. Payment of invoic
should not be interrupted if the institution has unpaid in
debtedness of not more than 10 days, and, in the case o
business institutions functioning well, not more than 30
Even today, approximately 70 per cent of all enterprise
and business institutions are credited through special l
accounts. The proportion thereof will rise constantly d
to conversion to crediting in terms of turnover in the c
of organizations whose operation is not seasonal in nat
With regard to enterprises and business institutions no
subject to receiving credit through special loan account
payment of invoices from suppliers should, it would se
be made from the payment account, while if the funds a
able to the individual institutions are inadequate, paym
credit should be extended on the condition that bank loa
are not more than 10 days overdue, or 30 days in the c
of well functioning institutions (analogous to the system
which participants in the clearing accounts are now cre
ited). This system would result in somewhat of an expa
sion of payment credit to business institutions. But thi
would make for a reduction in the number of deliveries
which prompt payment is not received. The analysis of
promptness of payment at 104 of the largest enterprise
made by the Finance Department of the Latvian Econon
Council shows that 85-90 per cent of the total number o
enterprises and organizations either have no overdue b
loans or short term ones. Therefore, the fear that the
alization of the present suggestion would not assure re
of payment credits is lacking in foundation. As far as t
comparatively small number of enterprises and organi
tions having long term overdue bank loans, and consequ
deprived of the right to receive credit for the making o
payments, is concerned, income from sales should be di
rected in the first place to payment of suppliers' invoi
To this end, such enterprises should, until they have m
their unpaid loans, have to open special temporary per
accounts, into which all sales income would be paid, an
from which the invoices for delivery of goods would be
The interest of the suppliers would thus be completely
tected. If inadequate funds were available to pay wages
the enterprise would be permitted, under given conditi
to obtain a short term bank loan of up to 30 days, or w
be required to appeal for financial aid to its superior
stitution.

Realization of these proposals would result in a noti
able acceleration of the turnover of funds in payments,
a precise adherence to the established sequence of payments from payment accounts, a flexible and businessl
issuance of credit assistance to enterprises when shor
term financial difficulties arise, a pronounced reducti
the number of bad debtors, and of the total number of f
ures to make payment in the economy, and, in particul
a complete elimination of overdue indebtedness to sup
for material goods and services. The advantage of the
gested system of payments over that now in operation,
in the fact that its realization would make for prompt
delivery of payment to suppliers in the established seq
With the system of decentralized clearing accounts, th

---

* See for example, Kommunist, No. 8, 1956, p. 6; Finansy USSR, No. 3, 1956, pp. 30-39, 65-67; and No. 10, 1956, pp. 24-29; Dengi I Kredit, No. 3, 1956, pp. 47-52, etc.

ice, as we have indicated above, is not infrequently vio-
d. The application, when necessary, of the sanctions
saged in the proposals set forth above, would sharply
ease the responsibility of management for the state of
nent promptness at enterprises; and in particular, for
npt payment of bank loans. In addition, under the pro-
ed system of payments, the functioning of the bank and
usiness organizations would be considerably simplified
ar as the writing of payment documents is concerned.
ne Latvian Republic office of the State Bank carried out
e second half of 1957, with the approval of the Board of
State Bank, an experimental merger of the personal
unt for decentralized clearing with the special loan ac-
its. This measure was carried out at ten major enter-
es in various branches of industry in the city of Riga.
invoices were paid from special loan accounts under the conditions envisaged for participants in the decentralized clearing accounts, and sales receipts were entered on the credit side of these loan accounts. Periodically, regardless of the state of bank accounts, sums required for payment of wages and other payments for purposes other than commodities were transferred to the payment accounts from the unified special loan accounts, regardless of the status of the bank accounts. This experiment showed the efficiency of this system of payments. All the enterprises involved in the new system of payment considerably improved their bank credit standing, payment discipline improved, wages were paid on time, and the majority of the enterprises usually had adequate funds at hand for other payments.

The positive results of this experiment testify that merger of the personal accounts with special loan accounts is a completely justified and timely measure.

V. Daryan:

In the Institute of Economics, Armenian Academy of Sciences

The collective of the Institute of Economics of the Academy of Sciences of the Armenian SSR in 1957 continued its research in the spheres of development and distribution of productive forces, history of the national economy of the Armenian SSR, problems in the political economy of socialism, and the economics of industry and agriculture in the republic. The collective study, "Problems of the General Plan for the Development of the National Economy of the Armenian SSR," was completed. The Institute prepared an outline for the development of the most important branches of industry and agriculture which supply raw materials to industrial enterprises.

In connection with the creation of economic administrative regions and Economic Councils the content of the theme on "Specialization and Cooperation in the Machine Building Industry of the Armenian SSR" was newly revised. The results of this study were discussed at the end of 1957 at a regional conference of institutes of economics of the Academy of Sciences of the Transcaucasian Republics with the participation of representatives of the Institute of Economics of the Academy of Sciences of the USSR, the State Planning Commissions and Economic Councils. In the recommendations of the conference it is noted that the specialization of individual machine building plants must, in its turn, be based on a clearly defined branch specialization of machine building in each of the republics of the Transcaucasus. It is recommended that the principal machine building branches of Union jurisdiction be retained and further developed in accord with local circumstances: oil and electrical machine building in the Azerbaijan SSR, electrical machine building, machine tool production and the production of automobile parts in the Armenian SSR, automobile production, the production of various types of mining equipment, agricultural machine building and machine tool production in the Georgian SSR. The recommendations of the conference have been forwarded to the State Planning Commissions, Economics Councils and scientific-research institutes of the Transcaucasian Republics.

Based on materials from the Leninakansk Textile Combine the factors making for reductions in production costs in the cotton industry were studied. In December 1957 the institute and the management of the combine held a scientific-production conference with the participation of engineering-technical personnel and leading production workers at which the results of work on this subject and practical suggestions were discussed. In particular, it was recommended that optimum methods of spinning be used, that methods of work according to engineer Kovalev's system be introduced, that the quality of machine maintenance be raised and that slashing departments be reorganized and equipped with high-productivity equipment, and so on.

In 1957 work was completed on the theme of "The Economics of Electrification of the Southern Line of the Transcaucasian Railroad." The study showed that under the conditions existing in the Armenian SSR, of all types of tr
traction electrical traction was most effective from a
technical economic point of view. The change from ele
locomotives to diesels on the Masis-Leninakan section
found to be economically inadvisable.

In the division of agricultural economics a study was
ducted on questions of costs of agricultural production
price formation in collective farms of the Armenian SS
A methodology of calculating costs of agricultural proc
tion for four production types of collective farms was
posed and some questions of price formation for agric
tural output were elucidated. It is planned to discuss
liminary results during the current year at a conferen
specialists called by the Ministry of Agriculture of the re

In accord with the plan for coordinating the work of
Institutes of Economics of the Academy of Sciences of
Transcaucasian Republics our collective conducted a s
of questions of the location and specialization of agric
in collective farms of the mining regions of Armenia.
results of the work on this problem made it possible to
determine perspective indexes for the development of
culture and of industries which process agricultural ra
materials. Together with workers of the Water-Energ
stitute of the Academy of Sciences of the Armenian SS
consumption of energy by agriculture during the same
was calculated. This material was forwarded to the St
Planning Commission of the Armenian SSR for use in
paring the perspective plan for the development of the
tional economy of the republic for the next 10-12 years

The results of the study conducted by the Institute on
economics of agriculture helped to project the perspec
for the utilization of the land area of the republic in ac
with natural-economic conditions and the introduction
correct crop rotation, to reveal the possibilities of dev
oping irrigation, the location of new vineyards and orc
the expansion of dairy livestock breeding, sheep raisin
hog raising, poultry raising and other branches. In pa
ular, it is planned to have the kind of distribution of l
stock among zones which will ensure the greatest quan
of output per unit of land area with minimum expenditu
of labor.

Besides fulfilling the planned themes, as an aid to p
duction the institute in 1957 prepared the economic ba
ground for a number of new industrial projects. Thus
fulfilling the assignment of the Council of Ministers an
the Presidium of the Academy of Sciences of the Arme
SSR, data on the economic effectiveness of the constru
of the Akhtinsk mining-chemical combine for complex
zation of nepheline syenites were revised. As a result
the work done a decision was taken to project the com
during the period 1957-1958. It was also recognized t
it was suitable to organize the production of calcinated
soda and forsterite refractory materials in Armenia.
1958 the economic analysis of the suitability of utilizi
the deposits of rare and valuable metals in Armenia is
being continued.

The scientific-research work on most problems was
conducted in close connection with practical workers
the principal task of the institute collective was to int
duce the results of the research as rapidly as possible
industry and agriculture. The results of the research
discussed at sector conferences with the active partic
of specialists from industrial enterprises. Thus, in c

tion with studying production reserves at the "Polivinilatat" plant a scientific-production conference was called, recommendations of which helped to improve the work he plant. Workers of the institute who were occupied h questions of agriculture traveled to collective farms machine-tractor stations where they studied the eco- nics and organization of production.

n connection with the preparation of the perspective plan the development of the national economy of the repub- for 1959-1965 our institute, in agreement with the State nning Commission of the Armenian SSR and the Econom- Council, is working on a technical-economic analysis of umber of problems which are of major significance for ustry (the organization of large-scale foundry produc- n in Armenia, the reconstruction of the Alaverdsk Cop- -Chemical Combine, the development of road construc- n and others).

n the institute's work in 1957 a considerable place was upied by research on the history of economic thought the national economy. Thus, in the past year Assistant ofessor M. A. Adont's monograph, "The Economic Devel- nent of Eastern Armenia in the 19th Century," was pub- ned and presented a great deal of new material on the nomic history of the period. Two divisions of this work concerned with the final period of feudalism, and the rd with the period of development of capitalism in menia.

Professor Gulanian's monograph, "The Development of nomic Thought in Armenia in the 19th Century," which s published in the Russian language is devoted to the tory of Armenian economic thought in the 19th century. ofessor Zurabian's work, "The Development of Armenian nomic Thought in the 19th Century," has also been pre- ed for publication and will be issued in 1958 in a large tion in the Armenian language. A continuation of re- rch in this area is the work being prepared by A. Egia- ian on "The History of the Development of Armenian nomic Thought in the Late 19th and Early 20th Centu- s."

Vork on the following subjects is now being conducted at institute: reproduction of basic production funds in the stry of the Armenian SSR, effectiveness of their utiliza- , technical progress in the principal branches of industry he Armenian SSR at different stages of development of socialist economy, means of further strengthening cost ounting.

he themes on the economics of industry worked out by institute are of definite interest for the departments administration of the Economic Council. They include stions of organizing production in Armenian machine ding, cost accounting in the building materials industry, nomic evaluation of losses in enriching copper-molyb- um ores, the path of development of the food industry rmenia, and others. The institute expects to present results of its research on these themes for introduction practice by the appropriate boards and departments of Economic Council.

Tikhomirov:*

the State University of Leningrad

the Department of Political Economy of the Leningrad e University a great deal of attention is being devoted e scientific elaboration of two problems: "Studying the Factors and Uncovering the Reserve of Growth in Labor Productivity in Industry of the USSR (based on materials from machine building enterprises of the Leningrad Economic Council)" and "Studying Commodity Production and the Operation of the Law of Value under Socialism."

A group of authors of the department is preparing a monograph on "V. I. Lenin's Elaboration of the Basic Problems of Political Economy of Socialism." Last year the first collection of scientific work of the economic faculty was published in which representatives of the Department of Political Economy took an active part. The articles in the collection present an analysis of some problems of Marxist-Leninist political economy in which particular attention is given to revealing the operation of economic laws of socialism on the basis of generalizing factual material and the experience of socialist construction in the USSR and the People's Democracies.

A third collection of scholarly works is being prepared in which the results of the cooperation of members of the department with the collectives of a number of enterprises will be most fully expressed. This cooperation is considered by the department as an extremely important element in the activization of the scientific activity of teachers of political economy of Leningrad University.

In order to strengthen scientific ties with industrial enterprises of the Leningrad Economic Council three groups have been created in the department: reproduction of basic funds, reproduction of skilled labor, standardization of labor and wages. These groups, in a number of research projects, are studying and generalizing the experience of local machine building plants as well as providing help to practical workers of enterprises.

The department attaches great importance to attracting the most highly trained and capable students to scientific-research work through scientific student circles.

The students of the Economic Faculty have been striving recently for a scientific generalization of the practice of Industrial enterprises, collective farms and state farms. Participants in these circles prepare reports under the guidance of teachers. A group of students took an active part in studying the utilization of equipment at the Sverdlov plant. Generalized information in which the reasons for losses of working time at the plant were analyzed were presented to the planning department of the enterprise. The management of the plant expressed gratitude to the students for the research work they had conducted.

The value of this work, consists not only of the fact that the students studied actual practice and projected the means for a better utilization of each machine tool and of all equipment in the shop during the given shift, working day, ten-day period and month. The importance of the work done also consists in the fact that the students thoroughly learned the economics of production at a certain concrete point and formulated correct, scientifically verified conclusions from the materials collected in the process of the research.

In March 1958 a group of students, members of a scientific circle, together with a brigade of the regional committee of the party, took part in an investigation of the Leps Machine Building Plant. The students had the following task before them: by means of a full-shift observation to ascertain the degree of utilization of the production line and of a number of new technical items in the foundry shop. At a special meeting a schedule was worked out for keeping records and several brigades were formed for working by shifts. After the investigation and study of the economics of production the group of students turned to calculating the economic effectiveness of modernizing the equipment on the basis of methods which had been worked out earlier at the "Elektrosila," "Bolshevik," "Lenin," and "Krasnyi Metallist" plants. This work will also be continued during the beginning of the 1958-59 academic year. In a collection of the student's scientific work it is planned to publish an article on the calculations performed by a group of participants of the scientific student's circle on the effectiveness of modernization at Leningrad plants.

A rise in the level of scientific work by teachers of political economy is promoted by scientific sessions held annually at the university jointly with other departments of the economic faculty. At a scientific session devoted to the 40th anniversary of the Great October Socialist Revolution eight reports on the most important questions of socialist reproduction in the USSR and the building of socialism in the People's Democracies were heard and discussed. Of essential importance in activating the scientific activity of members of the department is the constantly operating theory seminar at which vital questions of the political economy of socialism are discussed. In the current academic year the following questions were discussed at the seminar: "Cost Accounting as an Economic Category," "On the Utilization of State Capitalism in the Economy of the Transition Period from Capitalism to Socialism," "On the Commodity Nature of the Means of Production," "On General Economic Laws," and "On the Development of Socialist Property."

I. T. (I. Tikhomirov)

The Work of the Institute of Economics, Uzbek Academy of Sciences After the Reform of the Management System

The Institute of Economics of the Academy of Sciences of the Uzbek SSR is working on problems arising from the decisions of the 20th Congress of the CPSU and those concrete tasks which stand before the national economy of the Uzbek SSR. The creation of economic administrative regions in Uzbekistan has also to a considerable degree determined the main directions of the scientific activity of the institute. In connection with this the institute is paying particular attention to problems of expanded reproduction and perspectives of the complex development of the whole national economy of the republic as well as of individual economic regions. This finds expression in the theoretical elaboration of questions of calculation and analysis of the social product and national income for individual economic regions, in the scientific analysis of intra-regional and inter-regional balances of the national economy of the republic, in determining the main directions of its development (taking into account technical progress and improvements in the organization of production).

The Institute of Economics jointly with the Statistical Administration of the republic undertook a calculation and analysis of the social product and national income of the Uzbek SSR for 1955-1957. This will make it possible in the future to have a considerably deeper comprehension of the processes occurring in the various spheres of the national economy of Uzbekistan, particularly in the fields of accumulation and consumption.

The specialization of Uzbekistan in the fields of agri
ture and industry is determined first of all by cotton gr
ing and therefore the institute collective has directed i
main energies on elaborating the perspectives for the
development of this branch and the industrial branches
nected with it. The institute's plan also included an inv
tigation into the history of the national economy of Uzb
tan and the history of economic thought of the peoples c
Central Asia.

The Institute of Economics was able in 1957 to impr
somewhat the organization of research work, to establi
contact with other scientific institutions of the republic
to perform a number of studies jointly with them. Avoi
involvement in a multitude of themes the institute conc
trated its principal attention on the most important que
This permitted an acceleration of scientific studies and
increase in their theoretical and practical value.

In 1957 the institute published a number of works am
ing to more than 1,280 printed pages. A considerable p
of the completed work is devoted to vital problems of t
economic construction of Uzbekistan. Thus, the collect
on "Questions of Economics of Industry in the Uzbek S
elucidates in detail the perspectives for the complex de
velopment of the Angrensk mining-industrial region, q
tions of expanding the gas supply for the national econo
and the complex application of hard fuel, and the means
utilizing intra-industry reserves in a number of branch
of industry in Uzbekistan. Another investigation is dev
to such vital questions as the location of the cotton-cle
industry in the Uzbek SSR, rationalization of cotton pro
ments and their transportation, raising the effectivenes
utilization of the productive capacity of cotton factories
measures for the improvement of labor organization a
wages in the cotton-cleaning industry, and so on. The
sults of these investigations, which were of practical
significance, were communicated to the State Planning
mission and the Economic Councils of the Uzbek SSR.

Last year the institute continued its work in uncover
reserves of growth in labor productivity in machine-bu
ing, cotton-cleaning and other branches of industry in
Uzbekistan. The materials and conclusions were comm
cated to the State Planning Commission and the Econor
Councils of the Uzbek SSR to be carried out.

The Institute of Economics together with other scien
institutions is investigating problems of location, spec
tion and the perspectives of development of agricultur
duction in Uzbekistan. Thanks to these investigations
necessary clarity has been introduced into the questio
agricultural regionalization in Uzbekistan and its natu
and economic factors have been taken into account. A
vestigation has been completed on the location, specia
tion and the perspectives of development of agricultur
Tashkent province which has also solved tasks connec
with the system of agro-technical, zoo-technical and o
zational measures taken for the purpose of ensuring a
increase in output per 100 hectares of agricultural lan
This study has been approved and is being prepared fo
publication and the recommendations of the institute h
been accepted by the State Planning Commission and t
Ministry of Agriculture of the Uzbek SSR.

The institute has completed and turned over to inter
departments its study on the organization of the econo
state cotton farms on newly irrigated land in the Golo
steppe. It generalized the leading experience in maste
mountain-masses and organizing state farms and also
termined the optimum size of economic units. Practic
recommendations are included in the completed study
are devoted to a rational combination of branches of a

in collective farms of various production zones of
ekistan. It shows what great results may be attained in
easing the productivity of crop and livestock production
a correct combination of branches of agriculture in the
ective farms of the republic.

great deal of attention is also paid to generalizing the
erience of socialist construction in Uzbekistan. In the
nograph issued on the 40th anniversary of the Great
ober Socialist Revolution, “The Development of the
nomy and Culture of Soviet Uzbekistan,” economic con-
ons in pre-revolutionary Turkestan are elucidated and
results of the economic and cultural development of
ekistan in the Soviet period are presented. In this study
reat deal of attention is given to questions of the develop-
nt of industry, agriculture, education and health care and
ertain cases comparisons are made with corresponding
a for foreign countries of the East.

he institute is also working out some general questions
ch are of interest for the socialist economy as a whole.
s, in the book “Questions of Investigating Regional
nplex Economic Problems” which was issued in 1957,
experience of many years of work by the institute in
area is generalized. As the regional conference held in
ober 1957 showed, the results of these investigations
be utilized extensively in working out analogous prob-
s in other economic regions of the country.

he successful solution of the problems of economically
mulating agricultural production and carrying out of cost
ounting is tied to the problem of utilizing the law of
ue in collective farm and state farm production. In con-
tion with this the institute has published a number of
rks on the methodology and method of determining pro-
tion costs and the economic effectiveness of agricultural
duction in collective farms.

In 1958 a department of political economy was created in the Institute of Economics and other departments were strengthened. In connection with the organization of an Institute of Agricultural Economics in Uzbekistan, the Institute of Economics of the Academy of Sciences of the Uzbek SSR concentrated attention on general questions of the development of collective farm and state farm production in the republic. The 1958 plan provides that the following four problems be worked out: “The Location of Socialist Production and the Economic Regionalization of Uzbekistan,” Expanded Reproduction and the Balance of the National Economy of Uzbekistan,” “The Law of Value and its Utilization in the Practice of Economic Construction,” “The History of the National Economy and the History of the Economic Thought of the Peoples of Central Asia.”

In 1958 it is planned to complete the study “Uzbekistan and its Economic Regions” which, besides containing a general economic-geographic characterization of the republic, elucidates the basis for its economic regionalization. The investigation of the perspectives for the development of south-western Uzbekistan, including the Samarkand, Bukharsk, Kashka-Darinsk and Surkhan-Darinsk provinces, will be continued. It is also expected that the study of the immediate perspectives for the development of the cotton-cleaning industry will be completed and an analogous investigation of the machine building industry in Uzbekistan will be conducted. It is planned to conclude the study on “The Law of Value and Questions of the Economic Effectiveness of Agricultural Production in Collective Farms of Uzbekistan.” In the plan a substantial place is occupied by an investigation of a number of questions connected with the problem of expanded reproduction and a balance of the national economy of Uzbekistan.

***

ED IN STACKS

Announcing a Pre-Publication Offer

FOUR SOVIET JOURNALS IN ENGLISH TRANSLATION

● PROBLEMS OF PSYCHOLOGY

(Voprosy Psikhologii, Journal of the RSFSR Academy of Pedagogical Sciences, six issues per year, complete translation)

● FOREIGN TRADE

(Vneshniaia Torgovlia, Journal of the USSR Ministry of Foreign Trade, twelve issues per year, complete translation)

● PROBLEMS OF PHILOSOPHY

(Voprosy Filosofii, Journal of the Institute of Philosophy, USSR Academy of Sciences, twelve issues per year, complete translation of major articles)

● PROBLEMS OF LITERATURE

(Voprosy Literatury, Journal of the Association of Writers of the USSR and the Institute of World Literature, USSR Academy of Sciences, twelve issues per year, complete translation of major articles)

These four primary sources of major significance will be available serially for the first time in English beginning July, 1959.

Subscribers who place orders prior to July 1, 1959 are entitled to pre-publication rates.

Journal	Pre-pub. Rates	Probable rates After July 1, 1959
Problems of Psychology	$ 55.00	$ 65.00
Foreign Trade	35.00	40.00
Problems of Philosophy	35.00	40.00
Problems of Literature	35.00	40.00

(Offer conditional upon subscriber response)

COMPLETE TRANSLATIONS CURRENTLY AVAILABLE:

SOVIET EDUCATION [Sovetskaya pedagogika] — Monthly journal of the RSFSR Academy of Pedagogical Sciences, $70.00 per year (12 issues).

ORDER FROM:

INTERNATIONAL ARTS AND SCIENCES PRESS
33 WEST 42ND STREET, NEW YORK 36, N.Y.